

THE SIKHS OF THE PUNJAB

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R. E. PARRY

THE SIGNS OF THE PUNJAB

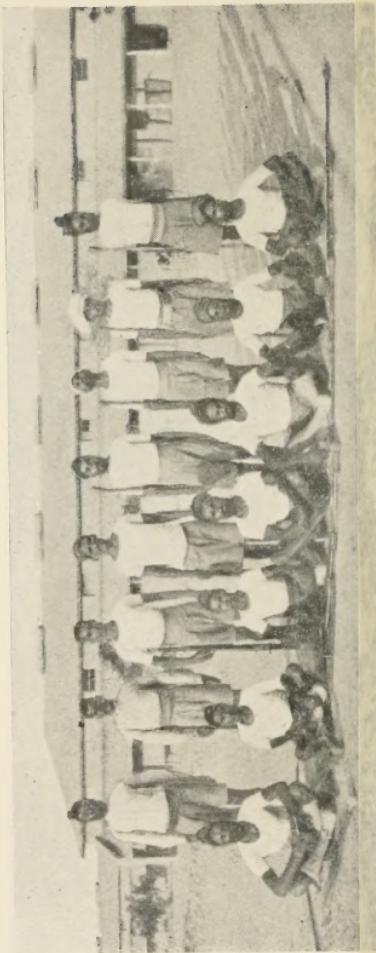
THE SIKHS OF THE PUNJAB

2ND BATT. 15TH



LUDHIANA SIKHS.

HOCKEY PLAYERS, 15TH SIKHS.



GYMNASTIC STAFF, 15TH SIKHS.

P 655s

THE SIKHS OF THE PUNJAB.

By

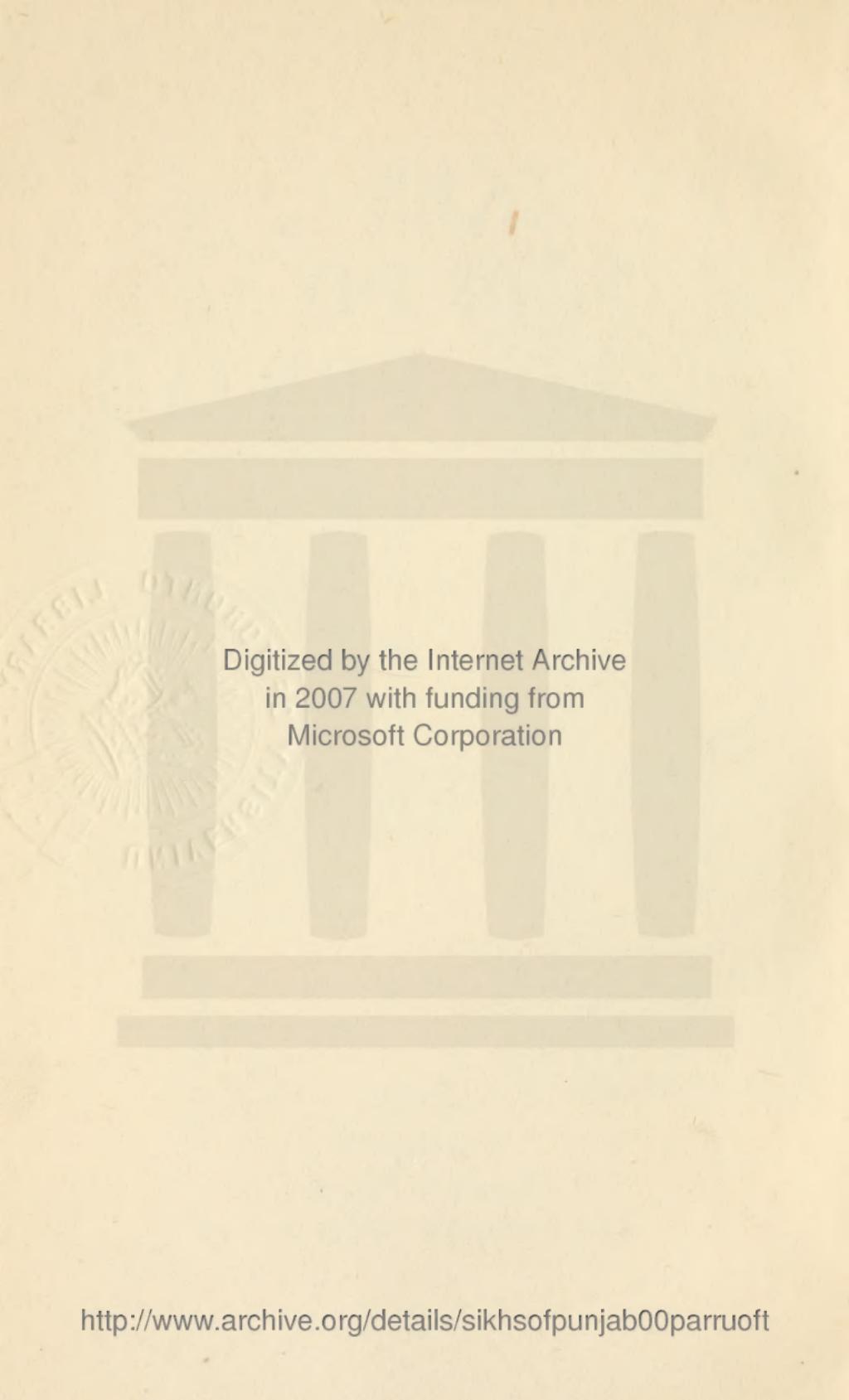
R. E. PARRY.

Late Indian Army Reserve of Officers; some-
time Acting Captain and Adjutant 2/15th
Ludhiana Sikhs. Sometime attached 35th
Sikhs.

182834
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TO COL. C. F. W. HUGHES, M.C.

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PREFACE.

This little book is written with the object of giving to the general public some idea of one of our most loyal Indian sects; though its numbers are comparatively few, yet it played no small share in upholding the traditions of the British Empire in no less than six theatres of war.

No true picture would be complete without some account of the environment that has helped to mould the Sikh character. This environment is especially typical in the Ludhiana district, and it is there that some of the finest types of Sikh manhood are met with.

Some attempt has been made to give the imitated pronunciation of the Punjabi words used.

I take this opportunity of thanking Professor L. W. Lyde for having imbued me with some of the ideas on Economic Geography, and Captain Burgess, for giving me three photographs of Sikh wrestlers.

Notice of errors will be most welcome.

R. E. P.

Oct., 1921.

The Sikhs of the Punjab.

CHAPTER I.

RELIGION AND HISTORY.

The Sikhs are not a tribe or race, but an order of military Hindu dissenters. Sikhism is a religion of the sword, since upon the steel did its success depend. All true Sikhs belong to the "Khālsa," or brotherhood of the Elect. Initiation into the brotherhood is only obtained through the "Pahul" (gate), or baptism of water. No one is a Sikh by virtue of birth. Thus it is quite common for a Sikh father to have several Hindu children.

These are the five outward signs of ^{Outward} Sikhism, each beginning with the letter ^{Signs of} K, ^{Sikhism.} and known as the five "Kukkas":—

(1) "Kes," or long hair; (2) "Kūnga," or wooden comb used to secure the top-knot; (3) "Kāchh," or short white drawers worn next to the skin; (4) "Kāra," or iron bracelet; and (5) "Khānda," or short two-edged dagger. All true Sikhs bear the title of "Singh," or lion. The following also must be observed, *viz.* :—Abstinence from tobacco, no meat must be eaten except the flesh of animals decapitated by one blow or "Jhātka," caste is not to be recognised; "Kāra Pārshād," or sacramental food taken from a common dish to break down caste must be eaten; the steel and turban must be worn; the hair must be let down and combed at least twice a day; the body must be bathed frequently during the day in cold water, and the "Grānths Sahib," or sacred writings, must be read morning and evening and, if possible, before meals.

The Gurus.

The spiritual teachers of the Sikhs were the ten "Gurus," whose names in order of living are as follows:—

1. Bāba Nānak	1469 to 1539
2. Angād	1539 to 1552
3. Amr Dās	1552 to 1574
4. Rām Dās	1574 to 1581
5. Arjan	1581 to 1606

6. Hār Govind	1606 to 1645
7. Hār Rai	1645 to 1661
8. Hār Kishin	1661 to 1664
9. Tēgh Bāhādur	1664 to 1675
10. Gōvind Singh	1675 to 1708

The first Guru, Bāba Nānak, was born near Lahore, in the Punjab, amid an environment of Mohammedan influences. Thus he was imbued with monotheism. He preached a very mild and gentle doctrine:—All men were equal in sight of God; God was universal and did not belong to any particular religion. Men were not to live an ascetic life, but were to live upright and pure lives, amid every-day scenes of business and pleasure. Nanak's conception of God is expressed by the beginning of the Sikh morning prayer:—

“ God is one, His name is true, He is the Creator, without fear, without enmity, Timeless Being, Formless, has never come into a womb, is self-existing, great and merciful.”*

Under Angad, Sikhism relapsed into an ascetic tendency among its disciples, but this

* Candler, “ The Mantle of the East ” p. 141.

Amr Das. was held in check by Amr Das, his successor.

Ram Das. Ram Das was the founder of the Golden Temple, or "Darbar Sahib," at Amritsar—"the Lake of Immortality." Amritsar is the Mecca of the Sikhs, who flock to worship the holy book, or Granth, in the Golden Temple, and to purify themselves by washing in the holy water of the sacred tank.

Arjan. Arjan was the great organiser of Sikhism; he set it on a firm foundation, and was the compiler of the "Granth Sahib," or Sikh scriptures, which contain the writings of Nanak, with extracts from the works of Kabir and Ramanand, contemporary saints. This book was afterwards called the Adi Granth to distinguish it from the Daswen Bādshah ki Granth, written by Govind Singh, the tenth and last Guru. The Adi Granth is written in Punjabi characters, which are known as Gurumukhi, or writing of the Guru, and is metrical throughout.

Arjan, however, could not resist the temptation to meddle with politics, and as a result was imprisoned by the Emperor Sahangas at Delhi for having taken part in aiding a rebellion against the Emperor's rule. This severe imprisonment hastened the Guru's death. This very factor marked a turn-



SOME OF RECRUITING STAFF,
REGIMENTAL DEPÔT, LUDHIANA.



SHLON ROAD OUTSIDE WALL
OF KULHUR.
Note houses of menials.



TYPICAL "GALI" OR STREET
IN A SIKH VILLAGE.

ing point in the history of Sikhism, for from now onward it assumed a military aspect.

Hār Govind, his successor, was little more than a mercenary soldier, whose policy was continued by Gurus, Har Rai, and Har Kishin. Tēgh Bāhādar was little more than a robber chief, and in the end was caught and executed at Delhi by the Moghuls. His body, however, was rescued by three sweepers, who as a reward were admitted by Govind Singh into the "Khālsa," with the title of "Mazbhi," or faithful. These were the origin of the Mazbhi Sikhs, who form to-day the backbone of the Sikh Pioneer regiments.

Govind Singh, the tenth and last Guru, was a man of different calibre from his predecessors. He was intelligent, well read, a keen sportsman, and an adept at arms. His great work was to consolidate Sikhism against Islam. This he accomplished by preaching the Khalsa, attacking caste, instituting the "Pahul" and five outward signs, and thus forming a brotherhood bound together by the sword. Sikhs from now onward took the distinctive title of "Singh" (Lion) on taking the Pahul. Govind did not attack the doctrine of Nanak, but added to it. He also wrote a portion of the scriptures—the Daswen Badshah ki Grānths, which had great stimulating

Govind
Singh.

effects on the fanatical mind of his followers. Govind Singh spent the rest of his life in waging numerous wars with the Moghuls, but was so badly defeated that he was forced to fly to the desert country on the Patialā border with only a few followers. After the death, however, of the Emperor Aurangzeb, 1707, the Moghul Empire gradually fell to pieces owing to the growth in power of provincial governors, which produced rebellions—especially among the Mahrattas. Govind Singh, on being approached by the Emperor Bahadur Shah, took service under the Moghuls, and was sent to put down the rebellious Mahrattas. From this expedition he never returned, and died at Naderh, in the Deccan, from the results of a wound given by an Afghan, who avenged a father's death.

The next thirty years were among the blackest in Sikh history, for the Sikhs were put to death in hundreds by the Moslems. This oppression, however, only roused the latent qualities of the Sikhs. It was a common thing among them to indulge in night-rides through the Moslem lines just to purify their bodies by a plunge into the raised tank at Amritsar. Only a few ever got away again, since the majority paid for this daring with their lives.

In 1738 India was invaded by the Persians under Nadir Shah, who over-ran the Punjab, meeting with little resistance save for bands of Sikhs, who harassed the stragglers and plundered the baggage wherever possible. Nadir Shah was assassinated, and Ahmed Shah Abdali succeeded him, having his capital at Kabul. The latter invaded the Punjab, but was defeated by the Moghuls and forced to retire. Jussa Singh, a distiller, was the Sikh leader at this time. He took advantage of the general disorder to erect a small mud fort near Amritsar. Three times did Ahmed Shah invade the Punjab, but no sooner did he retire to Kabul when the Sikhs and Mah-rattas besieged his garrisons. The Sikhs at this time consisted of robber bands under a chief who had a mud fort erected in some suitable spot for his headquarters. The danger of the common enemy brought about a union of these bands into confederacies, or "Misls," under a more powerful chief. In 1763 the Sikhs became so powerful that on uniting they captured the town of Sirhind, one of the most hated of Moslem towns, since it was the scene of the murder of Govind Singh's children. This town was plundered and destroyed.

Invasion by the Persians.
Jussa Singh.
Misls.
Capture of Sirhind.

From now onward until the time of Ranjit

Singh dissension, owing to the struggle for power between the petty chiefs, robbed the Sikhs of attaining to that height of self-government which they so deserved.

Ranjit Singh.

However, by 1808, Rānjin Singh, by his cleverness and iron will, made himself master of the Punjab, and gradually extended his conquests so as to include the Peshawar Valley, Kashmir, and Multan. He brought about a disciplined regular army, modelled on the European system. His battalions were drilled by deserters from the East India Company's service. Following the British idea, he made the infantry the backbone of his army. This was not done without much opposition on the part of the free-living Sikh cultivators, but liberal pay and personal influence helped him to attain his object. His infantry in time became famous for their endurance and steady discipline. On his death in 1839 the army became unmanageable owing to weak rulers, and general disorder resulted. The sirdars, alarmed by their loss of power, decided to try and recover their lost prestige by invading British territory. This brought about the First and Second Sikh Wars, ending in the annexation of the Punjab by the British. The latter were so impressed by the stirring fighting qualities of

First and
Second
Sikh Wars.

the Sikhs that orders were given for the raising of several Sikh corps for British service. Among the first were the 14th and 15th Sikhs, who were raised respectively at Ferozepore and Ludhiana. The latter regiment is one famous for its discipline and splendid physique of the men. It recruits in the Ludhiana district, tall men of the farmer class. This regiment did splendid work in Egypt, Chitral, and N.W. Frontier campaigns; in France, especially at Neuve Chapelle, and against the Senussi in 1915-16.

The qualities of the Sikh as a soldier are too well known to be enumerated, but it is well to remember that "Sikhism has only been kept alive by fostering Govind Singh's tenets in the Indian Army, and especially in the Sikh regiments which have done so much to preserve the traditions of the 'Khalsa.' " *

* Col. C. F. W. Hughes, M.C.

CHAPTER II.

CHARACTERISTICS OF THE JĀT SIKH.

The characteristics of the Jat Sikh may be summed up in three words—stubbornness, patience, and courage. These qualities are both hereditary and derived from environment and occupation.

The task of the cultivator is no easy one; he works from dawn to dusk throughout the year, as his irrigated land needs his whole and constant attention. The stubborn trait of his character is seen in his love of litigation. He will never yield a point, however trivial, and will never abandon his case if there is the slightest loophole or glimmer of success.

Love of
Litigation.

The religion and precepts of the Khalsa engender that freedom which marks him out from his Mussulman confrère.

He has inherited from his ancestors great soldierly qualities. In battle, when trained by British officers, he never shows his back to a foe, is never addicted to panic, and in a tight corner can be absolutely depended upon.

The Jät Sikhs of the Ludhiana district are especially renowned for their soldierly qualities, and have brought fame to the 15th Ludhiana Sikh Regiment, which was recruited and raised in Ludhiana in 1824.

The dress of the Jat Sikh consists of a "dhōti," or kilt, round the loins, a cloth **Dress.** sāfa, or turban, on the head, and a pair of Punjabi jūta, or shoes, on the feet. Around the shoulders is thrown a "chāddar," or cloak. The dhōti usually reaches to the knees but if worn longer is a sign of high social rank. Sometimes a Kūrta, a kind of blouse with baggy sleeves, is worn. Kachh, or short white drawers, are only worn now by soldiers. Formerly the wearing of them was compulsory. "Paijamas," or trousers, are seldom worn outside the army, and only then by a person of some social rank.

For walking long distances the shoes are

taken off to save the leather. I have seen Sepoys, when on a route march, take off their boots and walk barefooted. In winter time a "chaddar" like a "razai" is worn. Sometimes this is beautifully embroidered. I saw one with a tiger worked on it in natural colours. It was life-size.

Pagri.

N.C.O.'s and sirdars in Sikh regiments are extremely fond of bright-coloured waist-coats. These are seldom seen in the villages. The *sāfa*, or turban, may be green, white, blue, yellow, or pink. The better class wear an inner "pagri" or "pag" of a different colour. The "safa" is so folded that a small triangle of the inner "pag" shows on the forehead. A full-sized "safa" is ten yards in length, and usually has nine folds on each side of the head. The "pag" is of military origin, designed to protect the head from sword cuts. Different regiments wear different coloured "pags"; the 35th Sikhs wear a yellow or "pihla pag," the 15th Sikhs wear a "lal," or red "pag."

All Sikhs when on a journey carry a long stick, a short knife, and sometimes a curved sword. I have only seen the latter carried under the saddle of a camel, as swords over a certain length are forbidden by law. Money



ZAILDAR AND SAFED-POST,
SIALHUR, LUDHIANA DIST.:



AN OLD SIKH HOLDING A
"HAQR." LADDER IN BACK-
GROUND LEADS TO ROOF.



NAND SINGH WEARING WHITE
SAFA, KURTA AND DHOTI.



TYPICAL SCENE ON EDGE OF
THAR DESERT.

is generally carried tied up in a corner of the "chāddar."

Men very rarely wear ornaments. Pensioners are extremely fond of their medals. These are often worn on a string round the neck.

Sikhs are extremely careful with money. Moneylender or Sahukar. They often have to be watched to prevent them hoarding money which should have been expended on food. Money is seldom banked, but any surplus is lent out or invested in camels. Every village has its Khātri Sahukar, or money-lender, who lends out at a rate of about $2\frac{1}{2}$ per cent. Surplus money is generally buried. During the war silver became very scarce through this habit, necessitating the use of one rupee notes and the re-adoption of a gold coinage.

All natives of India are extremely fond of travel, particularly by train. They love seeing the world. Sikhs find their way to China, where they are employed on police work at Honk Kong, and to East Africa. Sikh soldiers are now being rewarded by grants of land in East Africa. Possibly the same policy may be adopted with regard to Mesopotamia.

Many Sikhs came to England as convalescents during the war. They stayed at

Love of Travel.

Brighton, and from there were taken to see the King and London. They were especially delighted at this honour.

The Sikh is quite a linguist. Many old 1914 campaigners brought back a smattering of French. I was astonished once to be addressed by my new orderly as: " Bon soir, mademoiselle."

Sikh
Woman.

Sikh women are difficult to get a good look at, as at the approach of a stranger they disappear or hastily cover their faces. They are often handsome enough, but heavily decorated with silver bangles of all sizes and shapes. The nose is always pierced and contains some ornament. The ears and neck are covered with heavy silver bangles and chains. The ankles are generally hidden by heavy silver anklets. The brightest colours are worn.

The Gujars, or herdsmen, wear a distinct dress. The womenfolk wear a red dress bordered with orange, and a European-like black bodice with short sleeves. The head is rarely covered, and they return the stranger's stare with total indifference.

Sikh women perform the work usually befalling the lot of all native women, *viz.*, grinding of corn, preparation of food and the

taking of it out to their husbands and brothers in the fields, cleansing of the house, collecting of firewood and cow-dung, drawing of water from the village well (as it is considered degrading for a man to draw water), spinning of cotton into raw cloth, &c. Besides all this, they help their husbands in the field, especially with hoeing, picking of cotton, carrying home on their heads huge bundles of jowar (millet) and cherri (maize), &c.

Women must not eat in the presence of their husbands, but must have their meals apart after the men-folk have had theirs. When on a journey man and wife never walk abreast; the woman always walks in rear. She is not a companion, but is more like a servant; nevertheless, she is far better treated than her Mussulman or Hindu sister.

In every Sikh village one literally meets swarms of partially naked children. These paddle about in the water on the fringe of the pond or throw mud at each other. Others are found round the village well or the dung heaps. During the sugar-cane harvest every child habitually sucks a long piece of cane.

Many of the children have their hair parted in the middle and combed back to

Sikh
Children.

form a single plait adorned with a bright red ribbon; but in addition plates of metal are tied on to the head—one on the crown and one on each side of the plait at the back of the head.

Girls have their noses pierced when quite young. I have seen several with silver rings of two inches diameter in their noses.

The wealthier babies wear velvet cylindrical caps, embroidered with silver. These are exactly like those worn by Pāthān children.

Food.

The Jät Sikh has two meals, one corresponding to our breakfast and one in the evening corresponding to our dinner. The first is eaten in the fields after two or three hours' work, for the Sikh always rises at dawn and begins work at once. This meal is brought out by the women-folk. It consists generally of "chāpātis," made of barley, wheat, or maize flour, mixed with millet and salt—and dal. Plenty of "mirch," or red pepper, is used. The "chāpātis" are flat-like pancakes, which are grilled brown on a flat iron plate placed over a fire in a hole in the ground. The "dāl," which resembles curry and porridge mixed, is spread on the "chāpātis." The evening meal, when work in the fields is over, is a most substantial one.

In addition to "chāpātis" and "dāl," meat and vegetables are eaten. These vegetables comprise onions, carrots, and potatoes mixed together. The only meat that is generally eaten is goats' flesh. All goats must have been slain by the knife in a certain manner. This ceremony is known as "Jhātka," *i.e.*, the goat's head must be severed at one stroke of the sword at the back of the neck. Jhatka.

Animals killed in the chase may be eaten without the ceremony of "Jhātka"—such animals include the wild boar and hare.

Some villages have communal bakehouses Langā-
cr Khāna. "Langā-Khāna," where the "Jhinwars," Khana. or bakers, prepare the "chāpātis" during the hot weather.

A Sikh fireplace is made of mud, and re- Bharoli. sembles an earthen pitcher with part of its surface taken out. Two holes serve for added ventilation and escape of smoke. This fireplace is known as a "Bhārōli."

In a native regiment the men sit round in circles known as "Pāngāt," over their meals. N.C.O.'s superintend the distribution of the food. The evening meal consists of chāpātis and such vegetables (Sālūna) as potatoes, baigan, tori, and tindo. "Chawl," or boiled rice, is eaten three or four times a month.

Maha Pärshad (ghi, ata and chini, melted butter, flour, sugar) is eaten three times a week.

The Sikh loves this sweetmeat. If a Sikh is not a meat-eater, he gets an allowance of milk instead.

Cooking Utensils.

Sikh cooking pots are made of brass, or "pital."

They comprise:—

Thāli—a brass plate on which food is placed.

Kătora—a small brass cup.

Garba—a brass bowl used for boiling milk.

Gärbi—a small brass bowl.

Tawa—an iron plate on which the chāpātis are cooked.

Chāmcha—spoons.

Garra—an earthen water jar.

All the above brass utensils are scoured every evening in the village pond or at the well by the women-folk.

In the covered porchway of the main gate of the village of Gurm may be seen a very large iron cauldron some four feet in

diameter. This is the “Kārāha,” and is used for boiling the rice on the occasion of a “shādi,” or marriage. It is carried by means of two sticks which pass through rings on the surface of the vessel, so that two men can easily move it.

One morning a big Sikh ceremony was held in the “Gurudwara,” or church. This is called the taking of the “Pahul” (Gate), —the ceremony of initiating converts into the Sikh Brotherhood, or “Khalsa.” The “Pahul” is thus the Sikh baptism.

Fifty recruits were baptised. All were clothed in white safas, with iron quoit, white kurta and shorts. The legs and feet were bare. Each novice wore a bayonet.

The altar consisted of a raised dais, containing a large coloured embroidered picture in silk of Guru Nānāk, the founder of Sikhism. In front of this was a large pink cloth, on to which coins were thrown by the worshippers from time to time as an offering.

The Grānθi, or priest, switch in hand, sat cross-legged behind the sacred picture, protecting it from defilement by the host of flies which vainly endeavoured to alight thereon. He was a venerable old man, with a long white beard streaked with grey, and

wrinkled face with intelligent mien. During the initial ceremonies he sat immovable and with eyes closed. If not for the switch which he waved mechanically to and fro, one would have thought him to be some idol or god.

Some three yards above the altar was suspended a white canopy, while two sepoys stood at ease, one on each side of the dais. The novices, with hands clasped in front, formed three sides of a square round the altar, leaving the front open. One by one each kneeled on the left knee facing the altar, and at the same time forming a cup-shape with the hands, and resting both on the right knee. In this cup-shape the assistant Granthi poured holy water from a brass bowl, and at the same time called aloud: "Wā Guru ji kā Khalsa Siri Wā Guru ji ki Fätteh" (the Guru of the brotherhood and victory, Hail!) Five times the novice drank the water, five times water was poured on to the "Jurah," or top-knot, of the Kes or long hair, and five times it is dashed into the eyes. Fifteen times the novice repeated the cry after the initiator. The recruit kissed the floor, stood upright, threw a coin on the red cloth, repeated aloud the greeting, and joined the congregation as a fully-fledged Sikh, with the added title of "Singh," or lion.

All were initiated in turn. Meanwhile the congregation, sitting cross-legged on the "durried" floor, looked on; occasionally a worshipper entered. He approached the altar, flung a coin, kissed the ground, murmured a prayer, repeated the war-cry, and joined the congregation.

Singh or
Lion.

We occupied a post of honour on the left, facing the altar, sitting on a white cloth which covered the floor. Our shoes, taken off by a sepoy, were left together with our topees outside. It was not easy for us to sit long in such an uncomfortable position, and soon we began to feel cramped long before the two hours—the estimated length of time —were up.

All the principal officials wore long naked scimitars suspended from a white scarf thrown round the right shoulder. After the first ceremony these were taken off, and lay, together with the scattered coins and two sacred steel miniature trowels, on the floor.

A huge iron bowl was now filled with sweetened water, or "Amrit," stirred with a knife. Each recruit drank twice of this, putting his lips in the same spot as the one before him had done. This ceremony was to break down all caste.

Amrit.

The novices were now addressed by the Granthi on the precepts and principles of Sikhism, then the music, such as it was, began. Two tomtoms, one cymbal, and a small harmonium provided the accompaniment to a monotonous but very rhythmic chant. To the music the novices with clasped hands moved round the altar.

**Kara
Parshad.**

Before the departure the sacred food, or “Kāra Pārshād,” was given to all Sikhs present, irrespective of caste. It is a white sweetmeat, made from sugar, flour, and ghi. A lump was given to us—to the great delight of all the congregation, but we could do little more than taste it.

For the final ceremony all stood while the Granthi, rising from the dais, addressed the Gurus, invoking their spirits. Three ringing “Fattehs” (cheers) concluded the ceremony.

**Karmai or
Betrothal.**

Sikh girls are betrothed between the ages of four and twelve. The girl’s father obtains a considerable sum, sometimes as much as 1,000 rupees, for his daughter. The betrothal or “Karmai,” is arranged by friends of both parties, and is accompanied by many curious rites and exchange of gifts. The ceremony is generally concluded by a feast, given by the girl’s relations.

The marriage, or "Shadi," quickly follows the "Karmai," unless the man is unable to pay off all his betrothal money. A marriage should take place on the first, third, or fifth year following the betrothal, because odd number years are considered lucky.

When the wedding has been fixed on a propitious day, the bridegroom, dressed in yellow, with a ringlet of flowers round his neck, sets out mounted on a mare for his betrothed's house. Accompanying him are all his male friends. At dusk they reach the village and are met by the girl and her relations with much noise and rejoicings. After a feast given by the bridegroom-elect, the final ceremonies take place in the girl's house. Facing east, the bride and bridegroom sit before the sacred fire, or "agni." A Grānthy then ties a corner of the girl's "chāddar" to a cloth. This the bridegroom places over his shoulder and leads his wife four times round the sacred fire. All this time prayers are chanted. At last the girl's hand is given to the bridegroom, and the marriage is consummated.

The bridegroom does not live with his wife till she is grown up, when he comes and fetches her to his home. This marks another ceremony, leave-taking, or "Mūklāwa."

Marriage ceremonies are so costly that a man is often unable to pay for its cost all his life through.

Widow
Marriage or
Chaddar.
Daina.

Once a wife has been purchased she is considered as belonging to the family. If the husband dies childless, the widow is often married to the elder brother of the family, if he so desires. This is known as "Chaddar Daina" (throwing the sheet). There are no ceremonies. All that is to be done is for the man to throw a red "chaddar" over the girl's head and at the same time put wristlets on her arms in the presence of relatives of both parties.

Death
Rites.

The recent influenza epidemic was so severe in the Punjab that I had exceptional opportunities of witnessing funeral rites.

Village of
Kulhur.

In Kulhur some hundred lay sick; at the entrance to the village I counted no less than eighteen burning pyres, while remains of broken pitchers lay thickly about them, showing that many in the prime of life had died.

Village of
Pahir.

Funerals take place on the same day as death, and the body must be burnt before sunset. Outside Pahir I watched a typical procession. In front one went carrying straw and wood for the pyre, next followed the

mourners two abreast, carrying brass vessels. Last came the corpse, wrapped in red, and carried by four men. This corpse was on a ^{Wooden} _{Bier or} _{Sirhi.} charpoy, quite contrary to the usual Sikh custom, which ordains that the body should be placed on a wooden bier, or "sirhi."

The carrying of the brass vessels denoted that an old man had died. These contained water, which at a certain spot was sprinkled in a circle round the bier; at the same time a brass vessel was dashed to the ground and there was general rejoicing. On the other hand, had the deceased been a young man, an earthern pitcher would have been broken, amid great lamentations.

On reaching the place for cremation, the body is laid on a wooden pyre, with straw beneath, and fire is applied by the heir. The relatives sit at some distance till the body is half-consumed. The heir then takes a stake from the smouldering pyre and breaks the skull. All wash before returning home.

During the influenza epidemic I noticed every body was well covered up with earth, ^{Influenza} _{Outbreak} ₁₉₁₈ and that no relations remained by the corpse _{Autumn.} for fear of catching the epidemic.

Diseases in villages soon spread; the native takes everything as a visitation of

Allah or the Gurus, and often refuses to take medicine. The effects of the epidemic were terrible; the people died in hundreds. In Ludhiana the deaths often exceeded one hundred a day.

Some villages were miles away from any medical assistance. The villages of Kulhur, Sialhur, Jharmat, Pahir, Gurm, Jandiali, Gopalpur, had no medical clinic nearer than Dehlon. However, the Government took prompt action and organised circuits of these villages. All British recruiting officers assisted in the distribution of medicine. The epidemic came after a heavy drought, when the village folk were half-starved owing to shortage of food. High prices were universal.

The Sikhs are noted for their fine physique and their athletic prowess. Army life does much to foster and encourage sport in every way.

Sports and Games.

Wrestling.

The most universally popular sport is wrestling, or "Kursti ka Khel." The combatants strip practically naked, save for a triangular loin slip made of stout cloth, and a cap which protects the long hair from dirt. The ring consists of soft earth freshly dug over. The wrestling in point of style savours of "catch-as-catch-can" methods. Before



THE START.



THE END IN SIGHT.
SIKH OFFICERS AS UMPIRES.

the start the combatants are extremely fond of showing off their physique to their admiring friends, and much slapping of thighs takes place. A fall is declared to have taken place when the vanquished man's shoulders are square with the earth. One fall is sufficient for a victory. I have seen wrestling matches last an hour before a fall was obtained, so great is the wrestler's stamina. All guest-houses contain pictures of "kurstilōg" wrestlers in various attitudes.

Sikh youths have the right build for jumping both at the high and long jump. The latter, however, is more usually practised. They have the knack of lifting the knees well into the air.

Sikhs run well, but are useless at long distances. In sprinting they hold their own with anyone.

A most curious game practised is known as "Sauti Phankna," or throwing the stick. This is thrown by the feet alone. I have seen a throw of 50 yards. The stick is a stout bamboo cane. One end of this is placed on a stone to enable the stick to be gripped between the big and index toe. A somersault is thrown by the competitor, who releases the stick at the zenith of the arc

Sauti
Phankna.

described, thus propelling the stick into the air. One man I saw performed the feat with either toe.

Heavy Clubs or Mugdars.

Many Sikhs have a passion for lifting heavy weights and swinging heavy clubs. These clubs, or "Mugdars," are often of enormous weight. One Sikh officer I knew kept one huge "Mugdar," with which he exercised himself every morning.

Quoit Throwing.

Quoit throwing has fallen into disuse save in the Army. These quoits, or "chukars," are made of thin steel with a razor outer edge; the quoit is some $11\frac{1}{2}$ inches in diameter from edge to edge, and the blade measures three-quarters of an inch. These are thrown underhand with a twist, causing them to spin in the air. The idea is to keep them on a level with a man's neck. All Sikh regiments wear a quoit in some form as a badge.

Hockey.

The Sikh takes very kindly to hockey, and is a great player; his stamina and speed stand him in good stead. His weak points are lack of combination and a tendency to hit too hard.

Minstrels and Native Music.

Sikhs love a chorus together after the evening meal. The songs to a European's ears are most weird. The range of notes is small, and rhythm plays a large part. One

invariably sings the air and the semi-circle sitting round take up the chorus with much clapping of hands and swaying of bodies. Minstrels, or "Ghite-lög," are found at every "mela," or fair. The instruments used consist of the Sikh violin or guitar and very small drums. The former has eight strings; the bow used is covered with small bells. The small drums are played with the fingers, and resemble tambourines. The singing is usually well done. At times the singers, to emphasise the words, make great use of motions of the head, body, and arms. For instance, at times I have seen players lean towards their audience, whisper the beginning of lines of the chorus confidentially, then with a toss of the head assume the erect position again. These wandering minstrels exhibit much skill in making use of local facts and interweaving them into a song.

It is the custom when entering a village for the headman to meet the stranger at the entrance, and in so doing to extend both hands towards the visitor. In the palm of one is always a silver rupee, which is offered as a sign that the headman lays all his personal wealth at the visitor's feet. The latter must then touch the coin as a sign of acceptance, being careful not to take it, or the

Entering a
Sikh
Village.

headman will expect a present.

Fairs or
Melas.

Village "Mēlas," or fairs, are very popular, and always draw a vast crowd either for amusement or business. A suitable "maidan" well shaded with trees is chosen near the village; usually the "maidan" forms part of the common land. All kinds of stalls, where all manner of sweetmeats and drinks may be purchased, are erected on its outer edge. Jugglers, quack doctors, wandering minstrels, strong men, cattle and horse dealers, Hindoos, Mussalmans, Sikhs, &c., are all jumbled up in one seething mass of humanity, always on the move and jostling one another good humouredly. Everyone smiles and seems to be enjoying life to the full. Village folk always take their families to these fairs, so outside all kinds of antiquated and broken-down conveyances are dumped together—the country-tonga drawn by one or two wretched looking ponies, springless, shaky, with no head-cover save for a ragged piece of faded "durree"; the cumbrous solid wooden agricultural cart, drawn by monstrous black-hided "byles"; and sometimes the almost obsolete "rāth," from whose curtained interior veiled women peep. Camels huddled together by the dozen crouch on their haunches, with their heads

beribboned and beflowered, sporting their gayest and richest caparisoned saddles, heavily padded with "razais" of the brightest colours.

The following is a list of Sikh festivals **Festivals**, held in the Ludhiana district :—

BHAIWALL—usually held in February, Bhaiwali, is in honour of Bala, a disciple of Guru Nanak.

HOLI—usually held in March, is a Hindu **Holi**. Saturnalia identified with the rocking of the image of Krishna, but among the Sikhs great fairs are held, and processions to local "Gurudwaras" and shrines are made.

BAISAKHI (May)—held at Amritsar, **Baisakhi**, has now developed into a great fair, at which much buying and selling of cattle is done. People flock to Amritsar from all parts of Ludhiana district for this fair.

GUGA PIR (August)—He was a Mussalman saint, the greatest of snake-kings. A great fair is held at Chhapar, near Dehlon, in his honour. **Guga Pir.**

Diwali.

DIWALI, or Feast of the Lamps.—This is held on the Hindu New Year's Day. All houses are freshly whitewashed and illuminated at dusk with candles and lamps. These latter are placed on the edge of the flat roofs. Sometimes candle ends are seen alight on the edge of the main road. Thieves are particularly active during this festival, as they consider a successful robbery committed brings good luck for the rest of the year.

CHAPTER III.

SIKH VILLAGE LIFE.

When viewed from some distance away a Punjab Sikh village looks very imposing and dignified. All the buildings are rectangular, and rise above each other tier above tier, like some Norman castle with its ascending embattlements, culminating concentrically in the keep; colouring there is none, for all the houses are constructed almost exclusively of mud gathered from the village pool. Sometimes a white-washed house stands up, towering above the background of mud colouring, throws back the sun's rays and catches the eye. From such a building the eye naturally descends to the village wall.

This is not a wall in the Roman sense, built purely as a means of defence, but simply the back wall of houses built together so as to form a continuous line of irregular height.

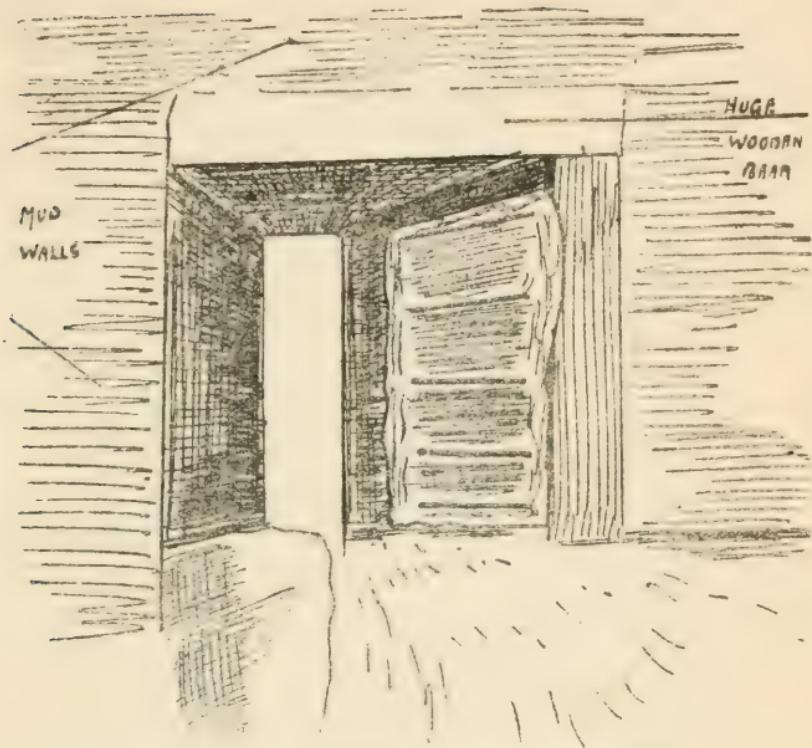
Village
Gates.

All villages have gates, generally one for each "hissa," or ward. These gates, made of roughly turned timber, are of immense height and breadth; supporting them is a massive rectangular archway of mud and brick, with a cross-beam made from a single tree trunk. Sometimes this is decorated with crude painted figures or animals. All these figures represent scenes from the life of the Gurus, national games, and from the battle-field. Wrestling scenes depicting combats between struggling "kursti-lōg" (wrestlers) stripped to the waist, are great favourites, then come lines of warriors dressed in old-fashioned uniform, carrying muskets.

"Galis"
or Streets.

From these gates radiate narrow winding alleys or "gālis," some eight to six feet wide, shut in by high mud walls of houses. As these are simply built where space permits, without any regard to the general arrangement of the village, the "gali" twist and turn in every conceivable direction.

At times these are barely passable, for heavy cumbrous byles chewing their cud



Gateway Entrance to Gali or Street.

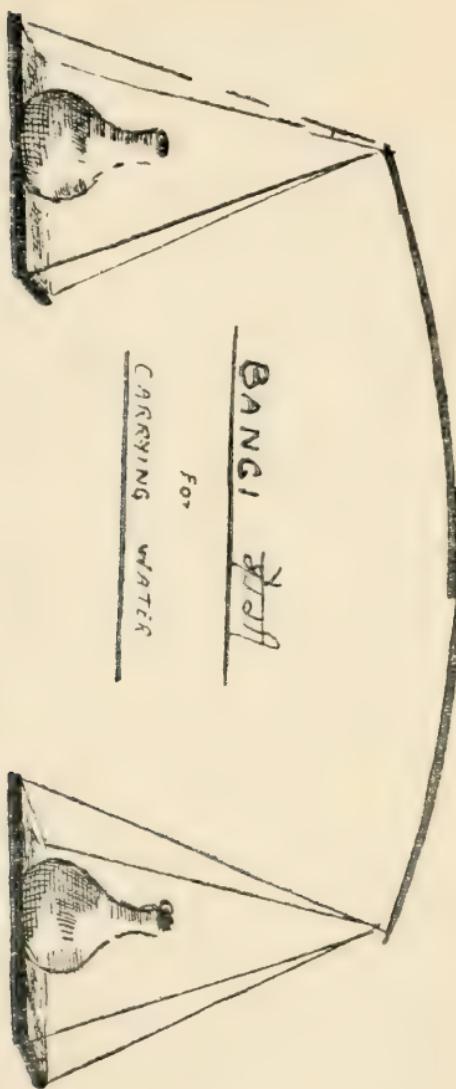
or feeding on "mūkhi" or "chērri" (maize) block the way. Here and there rough ladders, permanently fixed against the front of the houses project half-way across the alley. These ladders are used for access to the flat roofs, which in summer serve as a bedroom, and in the winter as a drying and storehouse for the crops. The

Bhisti.

quickly moving bhisti, with his “*bāngi*” on one shoulder and carrying four earthern pitchers, or “*ghārras*,” filled with water from the village well is met everywhere. Lightly clad in a ragged “*dhōti*” (kilt) and sleeveless “*kurta*” (blouse), with bare feet and legs, his services are in constant demand to keep filled the domestic drinking and water vessels. The rich pay him for his work, but the poorer class fetch their own water. The “*bāngi*” is like a pair of scales—the cross-beam is made of two pieces of strong, but pliable wood, so arranged that they overlap in the centre, and so give additional strength where the strain is greatest. The scale pans are replaced by a wooden framework in the shape of a hollow square to each corner of which are fastened grass supporting strings. In this framework rests an earthern pitcher or “*ghārra*,” with another usually on top, so that the bhisti’s load usually consists of four, two in front and two in rear.

Bangi.

Half-veiled women move silently along, clad in the brightest of colours and carrying on their heads all kinds of mysterious goods, hid from view by a cotton wrapping. Old men from the surrounding fields shuffle by, their faces completely hidden under a bundle of maize, or “*chērri*”; children of all sizes



—the smallest entirely naked—gambol among the “ byles ”; half-starved lean dogs and fowls complete the inhabitants of the streets.

The fronts of most houses open on the “ galis ” direct, except those of the more well-to-do, who possess a courtyard or mud wall enclosure. This serves for the housing of the domestic animals and carts. A mud trough, out of which the cattle feed, runs along two opposite sides. Fowls, thin, half-wild dogs, and children run about promiscuously.

Houses. Most houses possess only one storey, generally containing two rooms, open to the air on one side, so that there is no need of windows and doors. A few houses, chiefly those of the “ Sirdars ” (chiefs), possess well-fitting wooden doors, usually of immense size.

The lofty roof, consisting of earth placed on rushes, is supported by rough logs, crossing each other at right angles. Sometimes over the rushes is placed a thick layer of mud forming a flat roof, which can be used for a summer bedroom or an autumn store-house.

The only furniture is the string “ charpoy,” or bed, and the usual earthern and

brass cooking pots. In one corner of the room stands a ghārra containing drinking water, while against the side is a raised platform of mud, the usual resting-place of the charpoy. Sometimes a low perforated mud partition screens the sleeper from the passer-by.

The Sikh always sleeps in the middle of the day, often outside under a tree. All wrap themselves up well, completely hiding the head as a prevention against mosquito bites. The Sikh retires early to bed at nights, but always rises with the dawn.

In small villages guests and travellers are lodged at the public cost in the huge porched gateways. Here on either side of the way are raised brick platforms furnished with straw matting, and sometimes with a large wooden table-like affair, which serves for a general bed. These gateways are used as meeting-places for the village elders, who love to discuss the latest gossip with each other and with the guests.

If the guests are important, or if the visitor is an official, a "charpoy" is usually brought out for them to sit on; then the elders and Lumbadars having assembled, sit on their heels in a semi-circle to receive

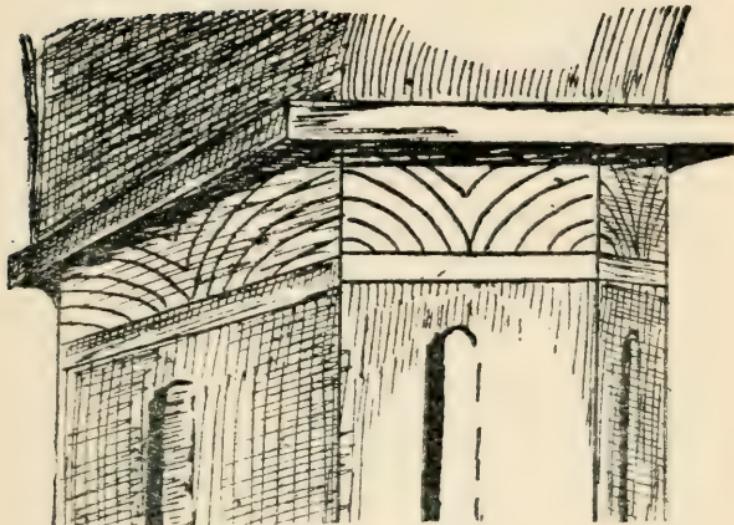
official notifications or the latest news. Once or twice I was provided with an armchair, but this is very rare. During the recent influenza outbreak, which in October, 1918, reached its maximum effort, the outlying villages were cut off from communication by post and telegraph for three weeks at a time. My visit on this account was all the more welcome, because I brought the latest news. "When would the Great War end?" was the first question. Then I would do my best to explain the situation, but the geographical knowledge of the villagers was of the scantiest. One big local magnate—an honorary magistrate—asked me if Bulgaria was the capital of Germany.

Pharm-
Sala.

If the village is a large one, a guest-house proper, or "dhārm-sālā," is provided; this is generally situated near the main gateway. These guest-houses are usually built of brick, with proper rooms and doors. Facing the "gālis" is a verandah raised some feet above the level of the ground and supported by pillars.

Lahra.

In the village of Lāhra the pillars are hexagonal in shape, and are decorated all the way up with quaint figures in bright colours. Amongst the figures were "kursti-lōg," or wrestlers, stripped to the waist, files of sol-



Pillar of Dharamsala. Lahra.

diers with old-fashioned head-gear and ancient muskets at the slope, drilled by a sahib on horseback, conspicuous by his huge baggy breeches, figures with green feathered wings, scenes from the life of the "Gurus"—the latter conspicuous by a halo round the head—birds and animals, chiefly parrots, "heron," or deer, and elephants. I endeavoured to obtain the opinions of the Sikhs regarding the winged figures, which exactly represented the Western idea of angels, but

Frishta.

all I got was—"Oh ! they are simply fairies." The Sikhs call them "Frishta." This is a Persian word, meaning "the invisible." The Hindus have the same ideas, but call them "Chandar Gupta," which are Sanskrit words for "no light." In the Purānas, or sacred books of the Hindus, spirits, demons and fairies are frequently met with. The Sikh believes in spirits, but only in an evil sense, as they are supposed to harm mankind.

Sant.

These guest houses are kept scrupulously clean, and are the special pride of the villagers. Sometimes the "Sānt" comes here to read the "Grānθ Sahib" (Sikh Bible) to visitors and others who care to listen. The "Sant" or religious teacher is found in every village. He is well read in the "Grānθ Sahib," and spends most of his time in seclusion meditating on holy things. People visit his cell to receive instruction, advice, and to bring food. In the gateway of the village of Gurm, in one corner, was built a little cabin possessing no outlet save a hole high up. This proved to be the cell of a wandering "Sānt," or religious mendicant, who had retired to the village to end his days. Here he lived for six months in seclusion, holding no communication with the villagers who brought him food. On his death he was

buried with great ceremony.

The Pipal Tree (*Ficus Religiosus*) is often Pipal, found growing outside the "Dharmasala," protecting it with its shade. This tree is held sacred by the Hindus. Under it or touching one of its leaves, he will swear a binding oath. The Sikh, who still possesses many of the old ideas learnt when he was a Hindu, still looks upon the Pipal as a sacred tree. From its juices many native medicines are extracted, and this fact, no doubt, adds to its veneration.

Few villages possess schools; I only saw one. This one was at Siālhur, and was situated outside the walls. The school was simple in design—a new building which owed its origin to the enterprise of the Zaildar and Inspector of Schools—just one long narrow room, with a mat on the floor for the pupils to sit on, and a charpoy fronting a low desk without legs, for the schoolmaster. Schools.

In one corner on the wall was a rack containing fourteen rolled-up maps—one, I noticed, was a map of the district printed in Urdu. An abicus and apparatus for cardboard modelling completed the furniture. This last acquisition—a sign of the most modern curriculum—astonished me. In an

alcove were a number of completed cardboard models, all of boxes, quite well made.

Near the schoolmaster's desk, easy to hand, lay a "haqr" (pipe), which seemed to suggest that he smoked while he instructed. A number of clay balls lay on the floor, obviously used for counting.

The school was situated on one side of a square compound used as a playground. A little plot of garden with a few flowers in bloom ran along one edge of the wall. A low mud wall surrounded the whole.

Jangpur.

After seeing the mēlā (fair) at Jāngpur, I decided to pay a visit to the house of my Subadar Major—Narrain Singh by name, who lived in the neighbouring village of

Mullanpur.

Mullanpur, situated a distance of one mile from the Ludhiana-Jagraon main road. The camel I was riding did not take long to cover the distance, as we went as straight as the standing crops permitted for our objective. The village was approached ultimately by a narrow lane, which led straight to the heart of the place. The usual stagnant pool lay here close to the buildings, providing a constant source for mud used for repairing and building of the houses. Bearing sharply to the left under an archway, we entered a narrow court. My visit took the Sirdar by

surprise, but he was delighted to see me. Entering a low wooden gate, I was in the courtyard, where a number of byles were taking a feed of "cherri." Our camel was here tied up, and I entered the house through a large double door made of wood. I found myself in a large square room with mud walls, earthern bare floor, and a lofty roof. It was delightfully cool; such a pleasant contrast to the outside glare. The walls inside were quite smooth, and had the appearance of having been distempered. They were adorned with quaint black and white pictures painted on the wall itself. These represented local animals and birds; I noticed a dog, deer, and two parrots. Each picture had a frame of white, and over it in Gurumukhi characters was written the name, such as "The Dog Tolim," &c.

The furniture of the room consisted of three charpoys, one armchair, a rough wooden table, brass cooking pots, and a number of glass bottles. The armchair and table were entirely English; these the Subadar Major had copied from the Sahibs of his regiment.

I was given the armchair as a post of honour, while the Subadar Major sat on the charpoy. He was especially proud of his table, which he showed off to his friends; it

was now carefully covered with a white cloth, and I was given the usual hot milk in a brass cup. One by one the elders of the village came in, and soon there was quite a crowd of them squatting on the floor. They never kept their eyes off me, but remained all the time sitting on their heels wrapped in their "Chăddărs" (blankets), discussing me in the local "Jăngli băt" (dialect).

Toba.

Outside all villages is found an evil-smelling stagnant pool, its size increasing with the size of the village. This is the Toba, from which the villagers obtain the mud to build their houses. One evening I wandered over the border into Maler-Kotla territory, and entered the village of Jandiāli. Outside this village is a particularly evil pool, full of loathsome slime. Naked Sikh children were at play round its edges, throwing mud at each other, and at the byles wallowing in it. Not twenty yards away was the village well; other byles lay on the edge of the pool.

Jandiāli.

This village was better planned than most I have seen, for its main gates were fairly wide and straight. It also possessed a few brick houses of two storeys. Here, by good fortune, I met a local official of the State engaged in revenue work. He had a good knowledge of English. In the course of our

conversation I asked him why the villagers allowed such a loathsome pool to exist under the cottage walls. He replied that he had pointed this out to the villagers, but that they always replied indifferently that it was there when their grandfathers were alive. At one time all hides were washed in the pool, but this custom had been given up.

For administration purposes every province, like that of the Punjab, is divided up into districts, or "Zilas," like that of Ludhiana. Ludhiana is again divided into three tehsils, viz., Ludhiana, Jagraon, and Samrala. Each Tehsil is again sub-divided into police areas or "Thanas." The Deputy-Commissioner controls the Zila, and under him are the Tehsildars and Thanadars.

Each village unit is self-contained, and manages its own affairs. Each village is divided into wards, or "Hissas," or "Patti." Each ward is managed by a headman, or Lumbadar. His business is to collect the revenues, for which service he gets five per cent. of the takings and remits them to the Tehsildars.

If the village is a large one, it may contain half-a-dozen "Lumbadars" (headmen). In such a case the head "Lumbadar" is

Zaildar. termed a "Zaildar." The latter has often control over several smaller villages as well as his own.

Safedpost. Often in a large "Tehsil" the "Tehsildar" is assisted by a "Safedpost," who generally controls some dozen villages.

Patwari. The headmen and often the "Zaildars" are generally unable to read and write. To assist them in their work "Pātwaris," or village clerks, are appointed. They keep the village records, such as lists of "Zamindars" or land owners, land boundary records, register of births and deaths, &c., in Urdu and Gurumukhi.

Gurm Village I found the "Pātwāris" very intelligent men; many had been educated in the Indian universities. In the village of Gurm I was shown the village records. These were kept in the Patwari's room in the eastern gate of the village, and were written in Urdu on khaki-buff paper. The only armchair in the village came from this room.

Kannungo. The work of the "Pātwari" is inspected by the "Kannungo," who has charge of several villages.

Zamindar. All true Sikhs possess land and are termed "Zamindars"; as such they have the right of voting in the village council, or "Pan-

Panchāit.

chāit." Only Zamindars pay land tax.

The village council consists of some half a dozen members of the community, one of which acts as the chairman, or "Sirpānch." This Council, although possessing no legal power, exercises a great authority over the brotherhood, and its decisions are very rarely appealed against. It deals with all matters of caste, grazing rights on the common land, and all disputes. Punishments take the form of fines, and in extreme cases, of ex-communication from the brotherhood.

Everyone is free to attend the meetings of the "Panchāit," which are generally held outside the "Dhārmaśāla," in the village gate, or under a large Pipal tree. Only the Zamindars may vote; the village menials may express their opinion with their voices, like the ceorls in the Witenagemot. Their opinion also carries some weight.

The village common land, or "Shamlāt," is of no fixed size. It consists of grazing land, generally studded with trees, and a burial ground. All landowners have equal grazing rights. The village council decides when the trees which grow upon the common land are to be cut. The money so obtained is used for the entertainment of strangers in the guest-house.

Shamlat
or Village
Common
Land.

The village menials are divided into two classes, those whose calling is said to be unclean, like the "Chūhras," or sweepers, and the "Chāmars" (leather-dressers), and those whose calling is not so low in the social scale. This latter class, comprising the "Nai" (barber), "Lōhar" (blacksmith), and "Tārkhān" (carpenter), are generally housed in small houses adjoining the village gates. The former class live outside the walls in a special "abādi," or abode.

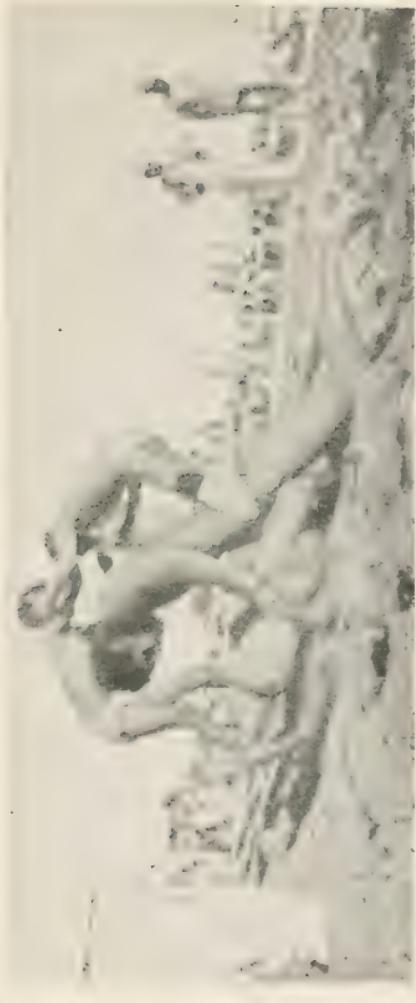
The "Nai" is one of the most useful members of the village community. He is really a barber, but among the Sikhs is known as a "Nāherna," or nail-cutter. His duties comprise shampooing, cleaning of the ears, and the looking after of the village guests. As a rule, he professes some knowledge of surgery and medicine. He is in great demand socially as the runner of messages between villages, and takes an important part at all marriages.

Naherna or
Nail-Cutter.

Tarkhan
or Ramgar-
hias.

The "Tārkhān," or carpenter, ranks highest among the village menials. Among the Sikhs he is known as a "Rāmgārhias," a descendant of Jassa Singh, the leader of the builders of the citadel, or "Ramgarh," at Amritsar. The carpenter makes all kinds of agricultural implements, the wooden carts,

SOIL DUG UP.



SIKH
WRESTLING CAP.

SIKH V. MUSSALMAN. THE LATTER WINNING.



N.C.O'S AND SEPOYS, 15TH SIKHS.

sugar presses, and Persian wheels. He is very intelligent and well educated.

The Mazbhi, or sweeper, is the lowest on the social ladder, but nevertheless one of the most useful members of the community. His duties comprise the cleansing and sweeping of the houses and streets, and the collecting of the cow dung. This latter task, however, is more usually done by his wife. The dung is carefully kneaded and placed on the village walls to cure. When dry it is stocked ready for use as fuel. "Mazbhi" means faithful, a title given by Guru Gōvind Singh to the rescuers of the body of Guru Tēgh Bāhādur at Delhi, where the Guru was cruelly executed by the Emperor Aurāngzēb. Three sweepers brought the Guru's body from Delhi to Amritsar, and as a reward were baptised into the Brotherhood.

Mazbhi
or Sweeper.

CHAPTER IV.

THE ECONOMIC GEOGRAPHY OF THE PUNJAB.

(i) THE CONTROL OF ENVIRONMENT.

The climate of the Punjab is closely associated with the general climate of India, but it is modified by its great distance from the ocean, by its proximity to very high mountain ranges, and by the adjacent Thar Desert on the south.

The economic conditions and possibilities of the Punjab depend to a great extent on the control of environment, but also on the quality of the human factor.

The control of environment is really an aggregate of component controls, such as

that of size, position, nature of the soil, climate, &c. These component controls are not isolated from each other, but depend directly on one another. Thus, for example, the nature of the soil depends on the position of the Punjab with regard to the mountains.

The Punjab has an area of nearly 100,000 Area. square miles, so that it is a little smaller than the United Kingdom, which has an area of 121,000 square miles, and ranks sixth in size with the other Indian provinces.

Its shape is like that of the mainsail of a ^{Shape.} full-rigged ship, with the meridian of 75°E. as a mast, and the parallel 30°N. as one of its yards. Thus its world position is sub-tropical in latitude and very nearly a quarter of the way round the world from the United Kingdom in Longitude. It derives some share from the longitudinal position of India as a whole, for the ships of the world focus ^{Position.} on the peninsula.

Its Eurasian position is an important one, for it is situated mid-way between the temperate anti-trade civilisation of the West and the monsoonal civilisation of the East, at a point where the western and eastern lobes of plateaux are at their narrowest breadth, and most easily crossed by mountain passes.

Its position is then a transitional one, for it stands like Poland, on a highway linking East and West. The breadth of this highway is strictly limited, for its edges are high mountains on the north, and desert on the south.

The regional position of the Punjab is unique, for its boundaries are mainly physical. The northern boundary with Kashmir coincides with the outer Himalayas, except in the north-east corner, where it narrows between the hill states of Chamba and Simla to embrace the upper Bēas and Sutlej valleys, in the Kāngra hill district. Such a mountain wall effectively cuts off intercourse with Kashmir and Lādākh. The only practicable route is via the new Rawal-Pindi-Murree road, up the Jhelum valley and over the Abbottabad Pass (5,000 feet). This is the route of the proposed electric railway to Srinagar. The impossibility of the use of other passes may be gauged by the height of the Pir Panjal Pass (11,400 feet).

Boundaries.

The western boundary is now equally shared by the Indus in the north-west and the Sulaimans in the south-west, but in the old days the Indus was the political frontier. The nature of the passes of the limestone north-west plateau-border ranges is such that

they invite descent from the Iranian Plateau into the fertile lowlands of the Punjab. The Punjab is an area of easy life, so that it attracts invasion by dwellers in regions of hard life. This influx of virile, hardy mountaineers has stimulated the plain-dwellers periodically, so that the Punjabi, Mussulman, and Sikh are still warriors, and dwell in walled villages.

It seems probable that the "Aryan" ancestors of the Jāts, who constitute two-thirds of the population of the Punjab, came through these passes from their home in Central Asia (circa 2,000 B.C.).

The southern physical boundary is the Thār Desert, which bars expansion southward, so that the natural outlet for a crowded population is to the south-east, across and down the Jumna to the Ganges bāsin.

These physical boundaries have very important effects on the soil, water supply, and climate of the Punjab.

On the north of the Punjab is a vast land area, high plateaux, and the Himalayas, which stretch for 1,700 miles with an average height of 20,000 feet. The Hindu Kush and Sulaiman Mountains run in a north-east to a south-westerly direction, roughly parallel

Mountains.

with the River Indus, so that the Punjab is enclosed on three sides by a horseshoe of snow-clad mountain ranges, really the up-turned edges of plateaux, which are among the highest in the world, and which present their steeper face towards the plains.

Rivers.

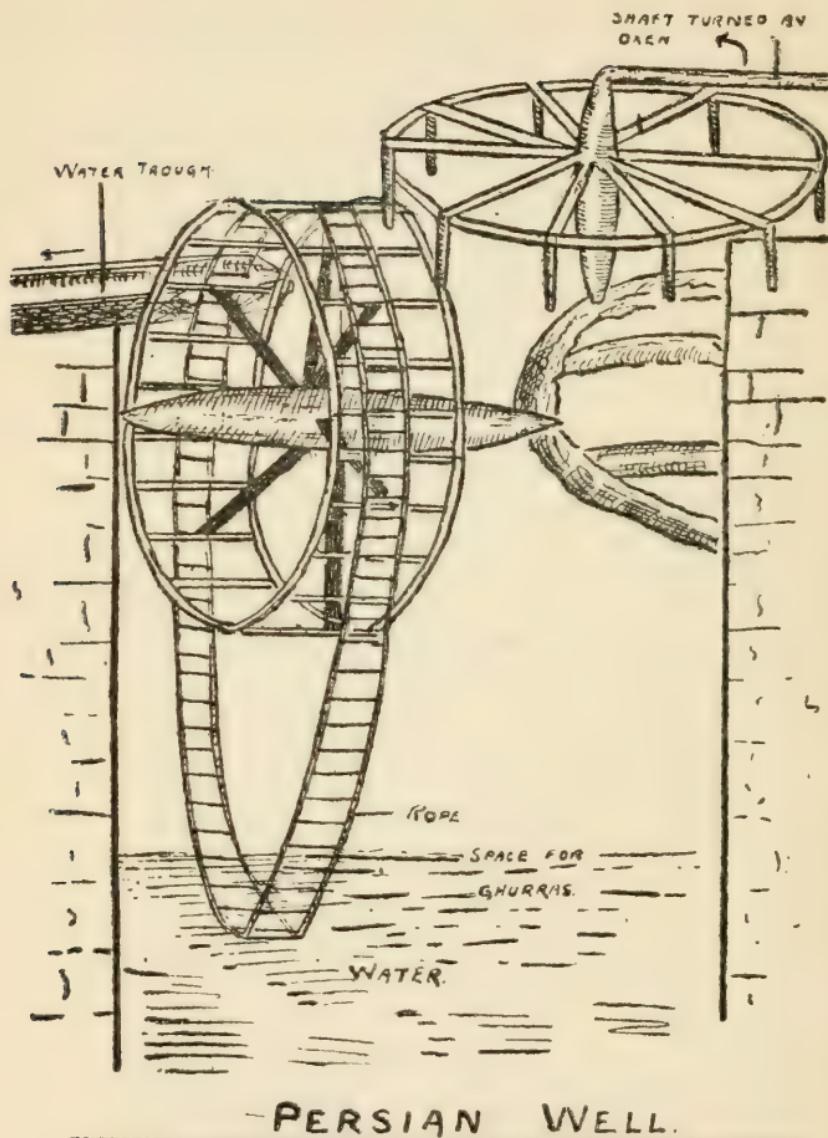
Such a proximity of perennial snow-capped mountains has led to the formation of many large constant-flowing rivers, which drain the Punjab towards the south-west. These rivers constitute the very life of the Punjab. Its very name means "the land of the five rivers," and its alluvial plains were the results of river action, which has brought down sediment from the eroded and denuded highlands. The Indus and the Sutlej rise from glaciers in the Manasarowar Lake region, and all the remaining tributaries are fed from snow-water. All have steep mountain tracks. As the rivers rise and overflow their banks in sympathy with the seasonal melting of the snows and the fall of the monsoon rains, layers of sediment are spread on the plains. This action has gone on for ages, so that the present surface soil was once a part of the highlands. This soil is rich in plant-food, so that given an adequate water supply the Punjab is capable of producing heavy crops.

Soil.

Another great advantage derived from the proximity to snow-capped mountain ranges is the fact that underground water is ubiquitous and is found whenever a well is sunk. The usual type of well is the Persian pattern, which works very effectively, and is cheaper than one constructed on Western ideas. Underground water is present under the Thār Desert.

Persian wells are found all over the provinces bordering on the N.W.F. Province. Their construction is simple and crude. The machinery consists of two wooden skeleton wheels, one horizontal and the other vertical. The latter is in the well mouth, while the former projects over the side, and has a pole fastened to its axis. To this pole is harnessed a "byle" (ox) or a camel, which supplies the motive power causing the wheel to revolve; on the horizontal wheel are fitted projecting wooden pegs, which fit into slots in the vertical wheel, causing it to revolve also. Round this latter wheel is a kind of endless rope ladder with wooden rungs. To these are fastened earthen "ghurras" or jars, which, as the wheel revolves, successively fill with water, which is emptied into a trough leading to the land. Thus a field is cheaply and effectively irrigated. The creak-

Persian Wells.



ing of these wells at work from sunrise to sunset can be heard for miles.

The general lie of the land is from north-east to south-west. As the rivers conform to this direction in a very striking way, they divide the Punjab up into districts or "dōabs." These elongated latitudinal strips of alluvial land favour communications between north and south, but tend to promote isolation one with another in a very slight degree, chiefly found in clan characteristics, such as peculiarities of dialect and idiosyncracies of temperament. Each "dōab" bears a distinctive name. The "Bari Dōab" lies between the Sutlej and Ravi, the "Rechna Dōab" between the Chenab and Jhelum, and the "Sind Sagar Dōab" between the Jhelum and Indus.

Fords only occur with frequency in the upper reaches of the rivers, so that their courses in the plain have served as defensive lines and obstacles to foreign invasion from the west. The only large trunk road crossing the whole river system is the strategic military one built by the British. This runs from Delhi via Ludhiana, Amritsar, Lahore, and Jhelum to Peshawar and to the Khyber Pass. Its importance may be gauged by the number of forts along its route. It is significant that

the building of such fortresses was facilitated by the ubiquitous alluvial soil. All villages and earthenware are made from such mud, for stone does not exist. Road-metal consists of nodular concretionary limestone. This explains the dusty appearance of the roads in the dry season, and their bad state in the wet.

Canals.

All the "dōabs" are admirably served by perennial canals, which follow the general lie of the land, emanating from a river in its upper reaches and again joining it at a lower level. Thus the combined lie of the land and absence of high ground favour irrigation. Canals serve as an additional means of communication both as a waterway and owing to the fact that on either bank third-class roads wide enough for tonga traffic exist. Such roads drain into the canal, and are in many ways often preferable to the ordinary highways, especially in wet weather. The presence of canals is nearly always indicated to the traveller many miles away by the extraordinary dense line of trees and foliage that mark their route. The dense shade and absence of dust contrast markedly with many of the public highways.

Bhatinda Canal

The Punjab is a country of canals, for rain is scanty. One of the largest is the Bhatinda



REST HOUSE, JAGHERA.



BHATINDA CANAL.





Canal, which runs through the Ludhiana district in a S.E. to N.E. direction. At Bassian and at Nanakpur-Jaghera the canal is as wide as the Wye at Ross. The bridges over it, carrying the main roads, Ludhiana-Raikot and Ludhiana-Jaghera, are well constructed of stone. The footpaths on each side of the canal are well patronised, and often are more easy to negotiate in a tonga than several of the so-called roads connecting many of the villages. The canal banks are well covered with flourishing trees of all kinds, serving as a cover for many species of wild fowl. The canal rest-houses at Bassian and at Jaghera are excellent, and far superior to any dak-bungalow.

A striking feature is their cleanliness and the beauty and extent of the gardens. The best time to arrive is in the evening after a long drive in the afternoon sun, for the dense closely-woven foliage seems to offer an open-armed welcome. Water is plentiful, and while the evening meal is being prepared, what could be more refreshing than a quiet plunge and swim in the canal! The meal over, an arm-chair and a well-loaded pipe have added charms. For company one has always one's thoughts and the deep impenetrable silence,

only broken by quaint hoarse notes of water-fowl and night birds.

The inconstant breadth of the rivers has increased the difficulties of the railway bridge engineers. All the bridges are of immense size and strength, since they have to withstand enormous pressure during the flood season; owing to the great range of temperature the expansion and contraction of the metal is very great, and has to be allowed for accordingly.

**Influence
of the
Thar Desert.**

The vast sandy Thar Desert has a great influence on the southern districts of the Punjab, since the prevailing winds are either from the north-east or from the south-west, according to the season. On the desert the heat is intense by day, but the nights are cold. This wide range of temperature, combined with the disintegrating action of the winds, have produced intense erosion, so that wave-like dunes and barchan of rolling sand, which ripples with the slightest breath of air, are very characteristic. The sand is continually encroaching on the fertile southern borders of the Punjab. In spite of the planting of sand-resisting grasses, the sand continues to gain ground, and dunes, like fingers from the hand of the desert penetrate a considerable distance inland. All dunes are

elongated in the direction of the wind. Such a dune is found near Kulhur, covered with tall feathery grass. Such grass is often fifteen feet high and covered with tiny spines, which are concealed by the inflorescence. Sand tends to affect the rivers, helping to produce ox-bows and islands. The canals are frequently cleaned out, but the rivers are little cared for. As a result, water-vegetation tends to choke channels which could be navigated. Such a scheme as the opening up of the Punjab rivers and connecting them with the sea would be doomed to failure owing to the continued presence of a deltaic Indus and a desert hinterland. The hinterland of the Indus is a desert possessing few towns, while the Ganges, although also a deltaic-river, possesses a rich hinterland, which contains the largest towns of India and is its most thickly populated area. In such a case it pays to keep open the mouths of the Ganges, and to daily charter its ever-changing channels, while a similar project in the case of the Indus would lead to financial disaster.

India on the whole is a tropical monsoon country; the Punjab is sub-tropical, but it depends just the same for its summer rainfall directly on the force of the Arabian and

Bengal monsoon currents. The Indian Ocean is the warmest in the world (mean temperature 80°F.), since it is surrounded by tropical land masses. Thus land has a double influence on the climate of India, while that of the ocean is halved. As the sun with the approach of the summer months moves northward towards the Tropic of Cancer, the vast land mass directly beneath its rays receives its maximum heat. The Thar Desert, with its low altitude, experiences some of the highest temperatures, especially in the basin around Jacobabad, where the thermometer often registers 128°F. in the shade. The Punjab also experiences high summer temperatures, due to its position in a horseshoe of mountains, while it lies open on the south side to the full breath of the Thar Desert. During June this desert and the greater part of the Punjab have an average shade temperature of 90°F.; Lahore gets 93°F. On July 5th, 1918, at 4 p.m., it was 104°F. (shade) in the train at Lahore. Other neighbouring land masses experiencing a June mean temperature of 90°F. are the Plateaux of Iran and Tibet.

Over these land masses, and especially over the Thar Desert around Jacobabad, the air is always rising spirally outwards in a

counter-clockwise direction, producing a vast area of low-pressure with a barometric register of 29.5 inches on its margin, and a centre of 29.4 inches. Such a low-pressure area draws in with a flue action winds that have travelled over five thousand miles of warmest ocean, absorbing moisture all the way. Such an action happens with marked annual regularity, and produces the wet monsoon. This monsoon advances over the country, distributing rain in its path where precipitating media exist; cyclonic storms, which occur in pulsations, precede its advance. Rain falls every afternoon, due to the daily upward circulation of the air during the mid-day heat maximum. As it rains, latent heat is given out, which enables precipitation to be arrested for the moment, and so moisture is carried far inland.

The monsoon is divided by the lofty Deccan plateau into two currents, the Arabian and the Bay. The Arabian current during the first fortnight of June first meets the lofty barrier of the Western Ghats (average height 5,000 feet) and its continuations, the Nilgiri Hills and the mountains of Travancore. Because these hills are so lofty and at right angles to the wind direction, the clouds are rapidly cooled and maximum rain-

The Arabian Current.

fall results. On the narrow coastal plain 100 inches of rain fall, and on the Ghats 300 inches. Bombay receives 97 per cent. of its rainfall during the monsoon period.

The south-west monsoon brings no rain to the Thar Desert, as there is an absence of precipitating media, due to the great heat, low altitude, and absence of mountains. This wind off the sea is very cooling at nights to such towns as Hyderabad Sind, where permanent wind screens on the flat roofs trap the wind and distribute the cool air among the apartments below. When the Punjab is reached rain begins to fall, as the land now rises gradually to the mountains, and the heat is less oppressive.

The Bay Current.

Meanwhile, the Bay current, having spent one-third of its force, which works up the Burmese valleys, and has been caught in the Gulf of Martaban and shut in by the Chin Hills, has approached the Ganges delta. Its first obstacle is the Khasi and Lushai Hills, where a portion is trapped and forced to rise rapidly. Here at Cherrapungi falls the second heaviest rainfall in the world, with a yearly average of four hundred and twenty-five inches. At Darjeeling the Himalayas reach their furthest point south. Here the current is divided, part going up the Brahmaputra valley, and the main current, which is

the stronger, up the Ganges valley. This valley is well watered both from cyclonic storms and from relief rains.

On June 30th the Bengal and Arabian currents meet, and together rush up the passes between Ninetal and the neighbourhood of Simla towards the region of the Manasarowar Lakes, where rise the Indus, Sampo, Sutlej, and Ganges.

Thus the Punjab, although on the edge of monsoonal influences, receives the benefit of both the Bengal and Arabian currents. Most of the rain falls during July and August, and is slightly heavier in the S.E. districts of the dōab plains than in the centre, *e.g.* :—

	ins.		% Total Rainfall.
Delhi has ...	23	June-September	85
Patiala	19.8	„	77
Lahore	15	„	76
Rawal-Pindi	22.5	„	65
Multan	4.7	„	70

Note.—The rainfall of Rawal Pindi shows the influence of relief.

The rains leave Punjab on the 15th of September, the United Provinces on the 1st of

October, and Bengal on the 15th of October. This is called the retreat of the monsoon.

Droughts only cause harm when the normal rainfall is only just enough. In the Punjab famine is no longer dreaded owing to the splendid irrigation system and abundant subterranean water. Famines in India can now be forecasted by comparison of pressures over Asia with that over the southern continents. Pressure in January in St. Helena shows what the rainfall will be in India in the following July. Heavy snowfall in Siberia means light rain in India, and *vice versa*. Recent observations conducted by the Chilian Government in the Weddell Sea have brought to light the fact that shortage of ice in the Antarctic followed a year later by the same phenomenon in Spitzbergen denotes a famine in India.

In winter owing to the intense cold, a region of high pressure rests permanently over the centre of Asia in the region of the Gobi Desert. This area has a diameter of about a thousand miles. From this vast high pressure area cold air is always gravitating spirally downwards and outwards in a clockwise direction. On its south side the barometric gradient is steeper, so that winds moving away towards India

blow with increased intensity. These winds reinforce the ordinary north-east trade winds, so that winds blow across India seeking the low pressure belt in the region of the Tropics from December 15th until the end of March. Such winds are known as the dry monsoons. As they blow from a cold vast land area, they bring no rain to India, except to the Coromandel coast. This moisture has been picked up from the Bay of Bengal during the passage across it of the dry winds.

India possesses a local high pressure area of 30.2 inches, which is located in the angle between the Sulaiman Mountains and the Himalayas, and centred around Peshawar. From this local high pressure area cool air gravitates spirally outwards in a clockwise direction. As the mountains bar outlet to the north and west, the cool air works down the Ganges and Indus valleys, then reinforces the north-east trade winds.

At this season of the year the sun is between the Equator and the Southern Tropic, so that anti-trade winds from the Atlantic exert some influence above the Northern Tropic, and supplies air for the constant emptying local high-pressure area of the north-west.

Cyclonic
Winter
Rain.

These anti-trade winds are cyclonic, and reach India via the Mediterranean Sea and the Iran Plateau. In so doing they pick up some moisture from the swamps of Seistan, and deposit winter rain on the western slopes of the Sulaiman Mountains and snow on the Himalayas. Occasionally cyclonic storms bring rain to the North-West Frontier Province, and to that part of the Punjab which is near to the mountains. Such rain is very beneficial to the winter crops, such as winter wheat.

This winter rain is fairly well distributed during the winter months, but falls most in January and least in December. It also diminishes in intensity from the N.W. to the S.E., and seems to follow the line of the Himalayan foothills, *e.g.* :—

	ins. Rainfall
Rawal Pindi has	8 Dec.-March
Lahore	3.2 ,,
Delhi	2.6 ,,
Multan	1.5 ,,

During the winter the mountains are heavily covered with snow, and the west wind blowing off these—especially in the evening—searches the cotton garments of the

natives. All wear a heavy blanket, embroidered "chăddar," or quilt (razai), to keep out the cold. Fires in the evening are very necessary, and wood is in a great demand. In the foothills the characteristic covering is the "posteen" coat, made of sheep-skins padded with wool two inches thick and reaching to the knee. The margins are ornamented with coloured fringes. Frosts occur at night, and radiate in intensity from Peshawar to the plains. This town often gets eighteen degrees of frost; Ludhiana often gets five.

During the day-time muggy, warm weather is experienced. For the Punjab the average daily temperature during January is between 50°F. and 60°F., according to latitude, but in the sun it is always hot, and light clothes are essential. The Punjab winter is hotter by day than the summer in the London Basin, but the daily range of temperature is much greater.

After the spring equinox the sun moves northward, the land becomes hotter, a low pressure area forms over the land, and a high pressure one over the sea. The light, warm air over the land no longer gravitates, and anti-cyclonic movements occur, bringing rain to such regions as the Assam Hills. No such rain, however, visits the Punjab, as such

movements originate over the sea.

Annual Rainfall.

The heaviest mean annual rainfall is in the Rawalpindi District in the north-west. This has an average of 34 inches, which shows some relief influence. The driest district is in the south-west, around Multan, which has an average of 6.7 inches. The south-east has an average of 25, *e.g.*, Patiala, while the centre around Lahore has an average of 19 inches. Using these figures, one gets an average rainfall of 21 inches, *i.e.*, 4 inches less than that of London. When one takes into account the intense evaporation and the sandy nature of the soil, it is obvious that the rainfall has to be augmented by irrigation water and that from wells. In this respect the Punjab, as we have seen above, is well supplied, and the future is likely to be in a better position still when projects, such as a new perennial Sind Sagar Canal, are realised.

The north of India, which lies within the sub-tropics, is nearer to the vast land mass of Asia than the region within the tropics. Consequently the Punjab, which lies within the sub-tropical area, is greatly affected climatically by this land mass; so that in summer the Punjab is too hot for its latitude, and in winter too cold for its latitude. In other

words, the Junjab has—with the exception of the North-West Frontier Province—a greater yearly range of temperature than any other province in India. This fact is borne out by the following table of average climatic data:

	Hottest Month	Coldest Month	Range of Temp.
Lahore	93°F.	53°F.	40°F.
Calcutta ..	85°F.	65°F.	20°F.
Bombay ...	84°F.	74°F.	10°F.
Madras	88°F.	75°F.	13°F.
Colombo ..	82°F.	79°F.	3°F.

The exhilarating cold weather of the Punjab and its relatively thin air have had a marked effect on the temperament and physical characteristics of the Sikhs. The further one journeys down the Ganges valley the muggier the climate becomes, so that the climate of the Punjab and of Bengal contrast strikingly. The inhabitants adapt themselves ethnologically to their environment. The Bengali offers a striking contrast with the Sikh. The former is stunted, with short hair and wide nostrils, while the latter is tall, of martial appearance, and possesses a greater degree of intelligence. The wearing of long hair and beards shows that the Sikh belongs

to a more northern clime.

The Punjab possesses several well-marked climatic zones of its own, but these have had no great effect on the Sikh population as regards peculiarity of temperament. Few Sikhs inhabit the foothills, since they are an agricultural and pastoral people, preferring the plains. More markedly than climatic features has been the influence of isolation brought about by the cutting up of the country into "dōabs" by the rivers. The Sutlej, the largest of the tributaries of the Indus, has had the greatest effect. The Sikh north of this river is often known as a Manjha Sikh, although the Manjha is really a part of the "Bari Dōab," strictly speaking. The inhabitants of the districts south of the river are known as Mālwa Sikhs. These southern districts comprise Ludhiana, Ferozepore, Malerkotla, Patiala, Nabha, and Jhind, and are more densely populated and extensive than the northern districts.

Malwa
Sikh.

The Malwa Sikh, owing to living under the influence of the Thar Desert, is more stolid and less intelligent than his more northern brother, but is every bit as courageous, and makes quite as good a soldier. In physique he excels the Mānjha Sikh.

The latter, owing to his increased intelli-

gence, generally makes a good native officer. I had a good opportunity once of contrasting the characteristics of the two kinds of Sikhs in the persons of two Sikh Jemadar Adjutants.

The Mānjha was more alert, slim, neater in his dress, and quicker in his movements than the Mālwa, who was a tall, clumsy, strong man, and wielder of a huge club or "mugdar." The latter could never make a neat "about-turn" without falling over himself; still, for all that, he was a born soldier, as the ribbon of the Star of Valour testified. The "Mālwa" may be distinguished from the "Mānjha" by certain peculiarities of speech and of dress. They have no love for each other; such antipathy, no doubt, is an inheritance from the Sikh wars, when the "Mālwa" was the first to submit to British rule, and even to aid them against his own people.

In the Mālwa zone, Sikhism is declining and Hinduism regaining ground. Caste still counts, and Hindu superstition is rife. It is the womenfolk who foster a tendency towards Hinduism.

Another class of Sikh, the "Dōaba," is often described. This class inhabits the region between the Rivers Bēas and Sutlej.

Manjha
Sikh.

Doaba
Sikh.

The soil is intensely fertile, so that the men-folk are keen agriculturists. Sikhism is rather lax, so that the "Dōaba" Sikh has the reputation of being inferior as a soldier to either the "Malwa" or the "Mānjha." A Doaba "sirdar" I knew in a certain regiment was shunned by the remainder of his fellow-officers, so that he lived a very lonely existence. Neither smartness nor intelligence was one of his characteristics, yet he was a born soldier and had earned distinction in the field for bravery.

As a rule, regiments stick to one class of Sikhs, and do not mix them. For instance, the 15th Sikh Regiment recruits almost exclusively Malwa Sikhs.

CHAPTER V.

THE ECONOMIC GEOGRAPHY OF THE PUNJAB (Continued).

(ii) AGRICULTURE AND INDUSTRIES.

The Sikhs are an agricultural people. Men and women work the ancestral fields surrounding the villages from daybreak to dusk. Agriculture forms the basis of all conversation; it is the root of their national life. Disputes connected with boundary marks, use of irrigated water, and land inheritance are very common.

There are two customs relating to the law of inheritance; one is "bhaiband," by which the property is equally divided among the sons, and the other is called "Chadar Band," by which it is equally divided among the

Laws of Inheritance.

mothers. The former custom is generally practised by the Malwa Sikhs and the latter by the Mānjha Sikhs.

Woodland
and Forest.

The Punjab may be described as a sub-tropical grassland, for the seasonal drought eliminates to any considerable extent the growth of social trees on the plains. The scarcity of trees may be gauged from the fact that the Pipal (*Ficus religiosus*) is a sacred tree, and oaths made under it are legally binding. Some villages only possess a single tree, and this stands usually near the guest-house or village well.

However, in the second millennium B.C., when the Aryan-speaking peoples were migrating into the Punjab, their progress eastwards was hindered by dense forests, which then covered the middle plains. This fact points to the desiccation of the Punjab since that date.*

At the present day the total forested area of the Punjab is nearly 9,000 square miles, or about 9% of the total area. Owing to the increased rainfall compared with that of the plains, most of these forests are situated on the slopes of the outer Himalayas. These

* Haddon, "The Wanderings of Peoples," P. 27.

hill forests have been ruthlessly exploited in the past, but now several larger preserves of Deodar (*Cidrus deodara*) and Chil (*Pinus longifolia*) exist. On the plains there are no forests in the true sense of the word, but isolated woods of Sal, Shisham, Tamarisk are found on the northern borders of the Phulkian States, while plantations of similar trees exist on both banks of the Indus and Chenab, near their confluence. The Sind Sagar Dōab and most of the area between Lahore and Multan is mere sandy waste, supporting half-choked thorny scrub, which was extensively cut for use as firewood in Mesopotamia.

In the district to the north of the Salt Range the ground is one network of nullahs (seasonal, dry, steep-sided valleys), due to the action of seasonal torrents on recent, soft, geological deposits. In such a country agriculture is well-nigh impossible. It seems reasonable to suppose, however, that this area was once well clad with timber, which has now vanished to supply the needs engendered by a cold season. Once bare of timber, the rains soon washed away the soft soil particles that the roots had bound together.

The Punjab, being a grassland, favours the growth of cultivated grasses—plants

Wheat.

with shallow roots, with a span of life that begins with the advent of the monsoon rains and ends with the approach of the hot weather. Of these cultivated grasses, wheat is of paramount importance. It is a grass first, and secondly a grain. Being indigenous to the Mediterranean basin, it responds at once to a Mediterranean climatic régime or semi-régime.

The Punjab is in the latitude of the eastern half of the Mediterranean basin, and—as it has been shown above—actually receives in January and February light rains from anti-trade Atlantic winds. These rains are followed by a long period of drought. Thus the Punjab may be considered as experiencing a semi-régime of Mediterranean climate.

The Punjab wheat is sown in early autumn and reaped at the end of the cold weather, so that it matures very quickly. At the end of the monsoon season, when the ground is moist enough for the seed to germinate, the wheat is planted. The winter showers and irrigation develop the stalk, and the early drought ripens and colours the grain. The winter rain is most important, for without it the grain, which depends on the quality of the stalk, would suffer. The

cold weather is beneficial, for it causes the roots to sink deeper into the soil, so that they do not wither under the heat of the early drought.

To quote Mr. McFarlane: "A mean annual precipitation of about 15 inches may generally be regarded as a minimum, except under special conditions, as, for example, when all the rain falls during the growing season, or when irrigation or dry farming is practised."* At present, therefore, without irrigation, most of the Sind Sagar Doab and the land between Multan and Lahore is too dry to grow wheat, but when irrigation facilities improve, these regions would be capable of producing an average wheat crop.

Colonists would soon follow the canals, so that semi-deserts would be turned into corn-fields. In 1889 the region now watered by the Chenab canal—the largest in India—was semi-desert, but between the years 1892-1901 nearly a million colonists were attracted to the area.

It should be noticed that wheat is only irrigated (when required) two or three times during growth, while cotton and sugar-cane

* "Economic Geography," P. 24.

require to be regularly watered every ten to fourteen days.

There is one disadvantage in growing wheat in low latitudes, namely, that the large percentage of blue and violet light is adverse to the plant.

In the other areas of the Punjab a hard wheat, poor in starch, but rich in gluten, and therefore valuable for milling, is grown. However, its yield is poor, being not more than eleven bushels to the acre. This can be explained by the use of primitive agricultural implements, primitive ideas, and native labour. The plough (hal) is but an iron-shod wooden contrivance; the harrow (suhaga) simply a flat board weighed down by the weight of the driver, and dragged over the clods by oxen; the seed is hand sown, and the wheat is cut with the sickle.

The fields are not manured, for the dung from the cattle is dried in the sun and used as fuel, since wood is scarce.

The wheat crop covers some 20,000 square miles on the average, or about 22% of the total area. Originally all the wheat was intended for export, while the people lived on millet and maize. At the present day, wheat and millet, or wheat and maize, are

mixed together to make the usual flat bread (chāpātis).

The export of wheat from the Punjab fluctuates annually, but increases at a minute rate; the increase during the war was due to the rise of prices following the European demand.

In 1917 India produced 376 million bushels of wheat, of which about two-thirds were consumed locally. Working on the basis of eleven bushels to the acre, the Punjab produces on the average about 140 million bushels, of which about one-third is exported. In 1917 the United Kingdom imported 168 million bushels of wheat, so that the Punjab is capable of supplying at least one-quarter of our needs. Karachi, the grain port of the Punjab, is the nearest Indian port to Europe. It takes two days by rail for the grain to reach the port, and three weeks (via the Suez) for the grain to reach England, where it arrives in late spring.

In the Thanas, or police districts, bordering on the Phulkian States, little wheat is grown; the staple food is maize. This is Millet. Known by the various names of Muki, Chilli, and Cherri. Maize and Millet (Jawar) are planted in July and harvested in the middle

of November. The heads of the maize are either roasted whole or are ground into flour to make the universal flat cakes, or "chāpātis."

Sugar-Cane.

Ghānna, Kāmād, Kāmādi, or sugar-cane, is usually planted from March to April. A shallow trough is made some six inches deep; into this is laid pieces of last season's cane, and the whole well irrigated. The young plants shoot upwards and downwards at the nodes, the juice of the pith supplying the required nourishment. The crop is cut in October.

Ahmedgarh. Near Ahmedgarh Station, on the 13th October, 1918, the standing crops comprised maize, millet, peas, and sugar-cane.

Minerals.

Being an alluvial plain, minerals are almost absent from the Punjab. Coal of a very inferior quality is found near the Salt Range at Dandot. This is used entirely by the N.-W. Railway. Rock salt is mined in the Salt Range, and some petroleum is found in a number of places in the Rawalpindi division, where it is collected from the surface of pools or from shallow pits.

Cotton.

The Punjab cotton is a quick-growing variety that matures in October, after about five months of life. Most of it is of the short-

stapled variety known as Bengals, which is in a great demand in Bombay, but which is not so important from an European point of view. It has a value for adulterating wool, and is keenly demanded by Japan. Owing to its sensitiveness to frosts, cotton can only be grown in the south and south-eastern parts of the Punjab. The soil which is impregnated with salt is favourable, but the excessive heat and the cloudiness of the monsoon season are adverse factors. Irrigation is necessary, at least, every fortnight. The cotton is of poor variety, but much is being done to improve the quality by careful selection of seed.

Near the canal between the villages of Nanakpur-Jaghera, and Jandiali are many acres of cotton. The cotton fields are usually the largest, and are protected from the goats by hedges of thorn. All the cotton from this and the Chhapar district is conveyed in the large agricultural carts to Ahmedgarh, where there is a gin, or "Karpar Ka Khana." Here the seeds are extracted and the wool pressed into bales. There are also gins at Dehlon and at Ludhiana.

The land which does not admit of irrigation is usually sandy, with a tendency to sand-dunes.

Deer.

velop into dunes. The Ludhiana-Jagraon road, some five miles from Ludhiana, passes through an open plain with few trees. Black-skinned native cattle and a few goats are seen on either hand, but the standing crops are few and far between. At one point the road cuts through a large sand dune covered with clumps of tall feathery grass. Several herds of "Heron," or deer, are to be seen.

Dehlon.

Another sand dune region exists some four miles east of Dehlon. I set out one morning late in October to reach the villages

Kulhur and Sialhur.

of Kulhur and Sialhur. There were three of us besides the "tonga-walla," in a broken-down country "tonga." Never shall I forget the cross-country ride we had! Both the villages are situated in almost inaccessible spots as regards roads. The tracks we used were deep with ruts, full of hidden holes, choked with fine sand, and almost buried at times in undergrowth and feathery forest grass. At one particular spot the track ended abruptly, and gave place to a region of sand dunes, into which the wheels of our tonga sank deeply. All around us was the tall forest grass in huge clumps reaching a height of fifteen feet. This shut out our view of the surrounding country and obliterated all landmarks. Of course, walking became a necessity, for the

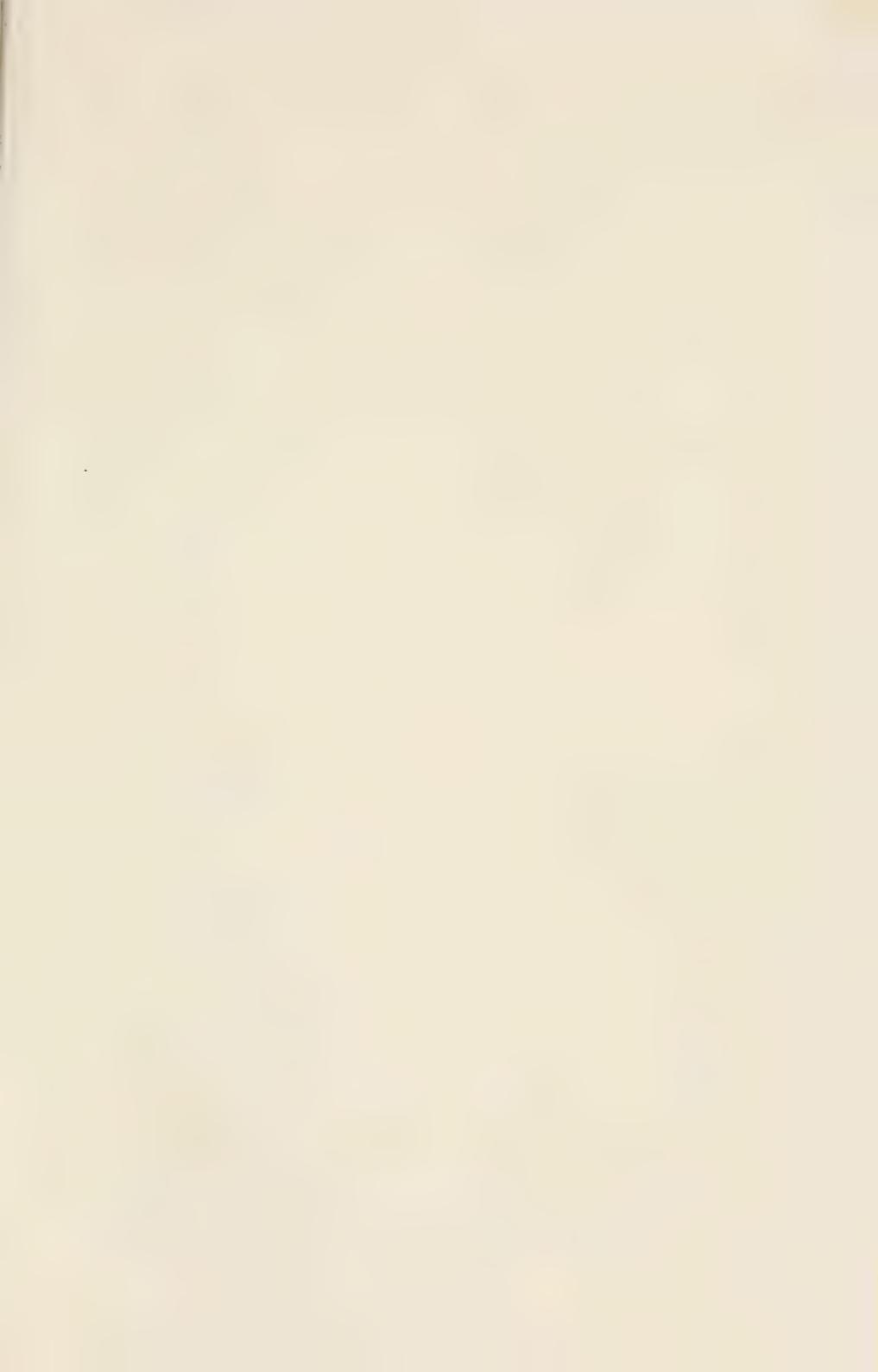


Plate VII.



FIRST-CLASS TONGA, NORTH INDIA.



SAND DUNES AND FEATHERY FOREST GRASS



HARROW OR SUHAGA. NEAR DEHLON.

TYPICAL CAMEL. NORTH INDIA.

pony could hardly drag the tonga through the fine sand. Suddenly we emerged on to a huge ploughed field with no sign of a path. There was nothing for it but to make a bee-line for the distant trees. Never shall I forget that tramp with my heavy marching boots sinking like lead into the fine sand, and with the sun scorching one's back. Luckily, one of my recruits who had come out to look for us found us, and conducted us to Kulhur.

The black-skinned oxen, or "byles," play ^{Oxen or} ~~Byles.~~ an important part as beasts of burden. The poorest cultivator possesses at least two. At evening time the "byles" are brought home from the fields, and either pass the night in the narrow "Galis" or in one of the courtyards.

Camels also are used by the more wealthy zamindar as a quicker mode of transit of ^{Camels.} goods between villages. I have even seen camels harnessed to the Persian wells. In one particular case that came to my notice the camel was blind-folded, and so needed no attendant. He went round at a measured pace until he approached the main axle; he then went slower, stepped over it, and increased the pace. This would continue all day.

To be mounted, the camel squats on all

fours. When one is seated behind the driver, the camel, with a gurgling cry, stands up by a succession of movements, first on its fore-legs, which causes one to be jerked backwards, then upright on all fours, which causes one to assume the perpendicular again.

The motion is very peculiar, but one soon becomes accustomed to it. A good camel does five "kōs," or ten miles an hour, easily on any broken ground. The Punjab, on account of its sandy soil, is especially adapted for its use.

The Sikh thinks a great deal of his camel, and adorns its head with streamers of bright-coloured ribbons. The camel is controlled by means of reins fastened to the rings at the end of a short silver bar, which passes through the nostrils. This bar is thickest in the centre.

The driver simply belabours the camel on the neck with a bamboo rod when he wishes it to go faster. The camel's tail is usually tied up by its end to the saddle cloth.

I have seen as many as four people on one camel—mother, father, and two children. The saddle is usually made for two; it is of wood, with raised pommels in front of each rider; over the seat of the saddle is spread

“ razais ” (kind of quilts) and mats.

Beneath the saddle cloth is usually kept a long “ kirpān,” or Sikh knife—a long curved affair with a broad blade of some two inches wide. This knife is carried by the natives who dwell around Raikot and Bassian.

The agricultural implements are most Plough primitive and made of wood. The plough or Hal. only rakes a single furrow, and is little better than a sharpened stake shod with iron. This is called a “ hal,” and closely resembles the Roman plough.

The harrow, or “ suhāga,” consists of a Harrow wooden platform, on which the driver stands. or Suhaga. This is drawn over the ground, crushing the hard clods into fine soil.

The agricultural cart is called a “ gădda.” Cart It is a slow, cumbrous four-wheeled affair, or Gadda. drawn by oxen. The body of the gădda in shape resembles the inverted gable of a house. Into this is placed a kind of bag made of matting.

The Sikh villager often wishes to take his whole family from one village to another, or to visit some well-known “ Mēla ” or fair. Railways are many miles away as a rule, and if convenient are a too costly means of transit. Accordingly, the “ gădda ” is used.

The whole family ride inside, and huddle together like herrings in a barrel. The household utensils are slung on behind the cart. The travellers sleep most of the journey, and sometimes the driver as well. I have met such a cart guided willy-nilly by the oxen, following a devious route from one side of the road to the other.

**Carriage
or Rath.**

The almost obsolete Rāth, or low four-wheeled carriage, with its covered-in body, with red cloth and curtains, may still be met with, but only in the out-of-the-way districts. It is used for the conveyance of women-folk; by drawing the curtains at the side the occupants are completely hidden. The interior is quite comfortable with cushions and mats, enabling the travellers to sleep at full length.

Industries.

The Sikh is essentially a landowner and an agriculturist. Consequently, one finds him little engaged in industries.

The only factories in the Ludhiana district are those in Dehlon, Ludhiana City, and Ahmedgarh, where the raw district cotton is sent to be ginned and pressed. India possesses 1,709 ginning and pressing mills, supplying work to 124,506 operatives. The Punjab possesses 120 such mills, employing 7,728 operatives.* The majority of such

* London Chamber of Commerce Journal, 18/6/20.

workmen are not Sikhs.

Villages are practically self-supporting. In them the local brass cooking utensils, the curved toe heelless Punjabi shoes, the agricultural implements, and other wants are made. It is only in cities like Lahore and Amritsar that industries of any importance are carried on.

Amritsar manufactures large quantities of "Kashmir" shawls, which are made from the cream-coloured hair of the goat. These shawls are locally embroidered with coloured threads. This embroidery is all done by the men by hand. Cotton and silk stuffs are also manufactured at Lahore and Amritsar to supply local needs.

Many goods that appear in bazaars such as that of Ludhiana and Amritsar are not locally made. The gold and silver embroideries, filigree work, ornamental brass vases come from Benares, the ivory carving from Delhi, and the carpets and furs from Afghanistan.

Lahore and Amritsar are large entrepôts of overland and local merchandise, which flows in from all points of the compass.

Some 60% of the people are engaged in agriculture. This percentage, owing to a

more adverse climate and to the greater growth of industries, is less than that of the Ganges basin.

The trade of the Punjab depends almost entirely on agriculture, and the main feature of the trade in a normal year is the movement of wheat to Karachi. In a bad season, when the rains fail, this movement is checked. There is a considerable provincial and trans-frontier trade. The latter is with Kashmir, Ladakh, Yarkand, and Afghanistan.

Population.

The population of the Punjab comprises some twenty millions, of which some two-thirds are Jāts, a pastoral-agricultural people whose ancestors came probably from Central Asia. All the fertile areas are densely peopled with some 400 to the square mile, while in the less fertile regions the population is as low as 150 to the square mile.

This density of population means abundant cheap labour. The labour is cheap because the cost of living is very low. The people are primitive, uneducated, and conservative in their ideas, so that western administration is, and will be, progressively beneficial to the area. Western contact has stamped out famines by the improvement of local native canals and by the establishment

of an irrigation system that has not its equal in the whole world. Western contact was the stimulus which originated the growing of wheat, and western-built railways carry this wheat to Karachi for European markets.

It is said that the building of the great wall of China brought about the premature fall of the Roman Empire, so that in the past the East influenced the West; at the present day the needs of the West influence the East, and the Punjab responds to this influence by growing wheat. The stimulus in both cases is the same—the desire for food.

CHAPTER VI.

RECRUITING METHODS.

The majority of people in England are entirely ignorant of the procedure and methods adopted to obtain recruits for the high-caste regiments of the Indian Army. Owing to the great demands made upon the Indian Army in Palestine, Dardanelles, East Africa, Mesopotamia, and even in France, the Indian Government was called upon to conduct a recruiting campaign upon a scale never before attempted. The country of the chief war-like races was scoured far and wide for recruits, and many parts of the Punjab were over-recruited, so that few were left to

till the ancestral fields. The greater part of India was then divided into districts under a white recruiting officer, who usually had another white assistant. These officers, with the aid of prominent native officials, established central depôts to which recruits were to be brought for examination before they were despatched to the various units.

During 1918 new regiments were being formed weekly, so that the call for recruits was always persistent.

The founding of a new unit usually began with the appointment of a Colonel, followed by that of other white officers. The parent regiment furnished a nucleus of some three hundred men, then the new unit was brigaded and left to its own resources to find recruits.

The plan usually adopted was to send parties of trained men under native officers to their own neighbourhood. These parties had to report for instructions at the office of a certain recruiting officer. From here, the men were sent to their own villages with orders to parade again on a pre-arranged day with any recruits they had succeeded in inducing to accompany them. These recruits were then examined by the British recruiting

officer, passed by the doctor, and sent to the regiment.

A better plan was to establish a regimental recruiting dépôt in the neighbourhood of the main dépôt. Here all recruits could receive a little preliminary training before being sent on to regimental headquarters.

Over such a dépôt a regimental British officer was placed in charge. He was always under the orders of the local recruiting officer, and all recruits had to pass through the latter's hands at the main dépôt.

A Main
Recruiting
Dépôt.

Imagine three sides of a hollow square lined with cottage-like mud-brick buildings, boasting of a columned verandah and facing a gravel-strewned courtyard, bounded on the open side by a high mud wall containing double swing-gates. On one side in the tiny rooms "babus" (native clerks) were busy with official correspondence and statistics. Sometimes work was done under the verandah as well, on rickety-looking tables. On the opposite side were the offices of the British officer and the examining room of the native doctor, a member of the I.M.S.

At an early hour the courtyard and the compound beyond were filled with a medley mass of sepoys, sirdars, babus, loafers, and recruits, so that one got a confused impres-

sion of khaki uniforms, white kashmir-cloth-mutti suits, relieved with a brilliant hued waistcoat or safā, and dirty, dust-covered, travel-stained dhōtis. The recruits generally huddled squatted together in one corner of the courtyard with a vacant expression on their faces.

At a fixed hour the recruiting officer emerged from his office and with amazing speed proceeded to measure the height and take the chest measurement of each recruit. A temporary check sometimes took place when a recruit would persist in expelling all the air from his lungs on being told to " *kinch pēth* " (expand your chest). To a novice a row of dusky skins would have little discriminative features, but the recruiting officer can single out one " *gōt* " or clan from another with unerring skill. The coarseness of the skin, the look of the eye, position of the cheek bones, the name of the individual are all clues.

If successful as to height and chest measurement, the recruits were passed on to be examined by the doctor. Towards the end of 1918—as in England—the best men had early obeyed the call, so that the doctor threw out many promising looking men, who were suffering from several complaints. The suc-

cessful recruit received fifty rupees, a woollen jersey, and a blanket, then was handed over to the local regimental dépôt. The recruit's sheet-roll was sent on to the regimental headquarters, which were sometimes three days' journey away.

A
Regimental
Recruiting
Depôt.

The recruiting dépôt I have in mind was well chosen. It was situated alongside the Jullundur-Ludhiana Road, on a green "maidan" (plain), overhung on its margins by giant pipal trees. A good well lay near. The camp was laid out in rows of gable-shaped tents placed end on. A green flag containing a yellow quoit, the regimental emblem, announced to passers-by the object of the camp: beneath the flag paced a sentry.

After a wash and a meal the recruit was furnished with a uniform, consisting of shorts, "kurta" (drill tunic), puttees, boots, and safā (head dress). Then began for him a month's preliminary drill of a very simple nature. He was taught how to wear his uniform, to salute his officers, to make simple military movements, and many other matters. The sports' side of the training was not forgotten. In the evening games were organised. The most popular feature was wrestling: to enable this to be played the sods were stripped off a patch of ground

and the soil well dug up. Long jump, high jump, races, all had their turn. I tried to introduce football. It amused the players highly, but no great skill at the game resulted. The players would not keep their places, but preferred getting in a jumbled mass, in which they pushed and kicked one another indiscriminately. This "scrum"-like mass never approached the goalposts, but generally wandered on the confines of the field, where abounded a plentiful growth of prickly cacti. I sometimes took part in such a game, and was often laid low by the tactics of the Subadar-Major, who frequently brought my headlong rush up short by the simple expedient of hooking my ankles with his curved-handled walking-stick. The game generally ended with the ball being punctured by a thorn.

Some evenings "sing-songs" were arranged for my special benefit. These took place under the pipal trees around a blazing log fire. The men had had their evening meal, so their enjoyment was spontaneous. The singing was led by the acknowledged experts of the art; all joined in the chorus. The range of notes was very limited, and the whole performance savoured of a rhythmetic-monotonous chant, to which all kept time by "Sing-Songs."

the movements of their bodies. One peculiarity of the singing was the prolonging of the high notes. Such a feat always produced great applause.

Administrative Work.

The whole administrative work of the dépôt fell on the head of the white officer. He had to run the whole "show" without any clerical assistance. All the records of clothing issued, extra milk, purchasing of goats, and the hundred and one other things connected with the camp were written in Guru-makhi and kept by the Havildars. These men, however good as soldiers, yet were unable to keep accounts without constant supervision. In one case, the Havildar could not draw straight lines, and had the trick of missing pages which, when discovered, he went back to fill, so that his records finally had no semblance of sequence or of order. It looked as if one had idly turned the pages while another had thrown words and figures at them.

The above case, however, is an exception to the general rule, for when well trained, Havildars in charge of accounts are thoroughly competent and trustworthy.

Recruiting Tours.

One of the duties of the British officer was to tour the surrounding country in company,

if possible, with local native magnates. One Friday I received an invitation to be present at a combined recruiting and War Loan meeting, to be held at Raikot, some 27 miles away. As there was no railway, I was compelled to go by tonga, stay one night, and return on the following day. The tonga was a rough country one with indifferent springs, and with a piece of ragged matting, supported by bamboo canes, as a protection against the sun. Four of us, in addition to my valise, were packed into that tonga. The pony knew its work, and trotted every inch of the way, with the exception of a half-way halt near Mullanpur. The first half of the journey the country was open, given up to tall grasses and rough pasture. Sand dunes were frequent, and their presence was always denoted by their crop of tall feathery grass. The remaining half, owing to the influence of a large canal, was given up to agriculture and the breeding of cattle. The road-side villages, save for the white gleaming "ziarat" (mosque), were all of mud. The road was in excellent condition, and was without holes.

Mullanpur.

It was impossible to stay in Raikot that night, so we put up at the canal rest-house at Bassian. Bassian. I was very hungry, so sent my boy to the village to forage. He came back after

an hour with some coarse flour made from millet, a chicken, eggs, and some artichokes. Needless to say, after I had had a tub, I could have eaten anything. A dinner was produced of "chāpātis," chicken cutlets, artichokes, and for drink strong tea without milk or sugar. This tea was served in an old enamel mug, which was part of my shaving requisites. Being without plates, each course was brought in on plantain leaves; even the salt had its piece of leaf.

Raikot.

The following morning I was up betimes, and set out for Raikot, where I arrived before the local magnates, who had intended journeying from Ludhiana by tonga in the cool of the morning. Meanwhile, I made the acquaintance of the local magistrate, who was attired in the usual Mussulman clothes, but also wore a ceremonial red fez.

A War Loan
Meeting.

Outside the magistrate's house some fifty village headmen or lumbadars with their friends had assembled. On the arrival of the speakers the meeting opened. The headmen, leaving their shoes outside, were massed under the verandah to listen to the speakers, who in turn mounted a kind of rostrum. The first speakers explained the War Loan; they had obtained a list of all the chief men of the district, and had already placed opposite the



A KID.



PET DEER, RECRUITING CAMP,
LUDHIANA.



GOATS EATING YOUNG TREE
SHOOTS.



GROUNDS REST HOUSE, BASSIAN.

names certain sums which were supposed to be proportionate to the wealth of each individual. The native speakers possessed a wealth of picturesque and vehement language; all the salient points were driven home to the accompaniment of loud bangs and shaking of the fist. One by one the chief men were singled out and asked what they were prepared to give. Some hesitated, and tried to prove with all an Eastern's skill how heavy the burden of poverty was. Such confessions, however, were fruitless, for the hearers, being rival villagers, could testify to the number of camels and oxen or to the extent of land that was held. In the end, each promised to subscribe a certain sum, and earned a loud "Shahbash!" (well done) from the speaker.

After the War Loan, a recruiting meeting was held, with the result that each "lumbadar" promised to find two recruits. The old "sirdars," Indian officers, each wearing many medals, came round afterwards for a chat. How their eyes would glisten on the mentioning of their old regiments! They are truly the grand old grey-beards of the village, and many are the stories they tell of nights to an opened-mouth audience of villagers.

A Recruiting Meeting.

A
Characteris-
tic Meal.

Afterwards I was offered a meal, although my host was quite perplexed as to what to offer me. The town was scoured, a brand-new American penknife with six blades, and a tea knife, with a shaky discoloured bone handle, were discovered. Such were my implements for the meal! This consisted of boiled rice, millet, chāpātis, a chicken, and a bottle of soda water. The other guests had their meal on the floor, and reclined around a white cloth. All ate by dipping their fingers into the common dish. I sat at a round table and did the best I could with my rough and novel implements. From time to time I was aware of many flashing pairs of eyes that watched me through a door consisting of stained glass. The meal over, water was brought in a brass vessel like a kettle, a brass pan was placed on the floor, and with the aid of a tiny piece of Sunlight soap, which was considered an immense luxury, I contrived to wash my hands in the stream of water that was poured out by one of the attendants. This method of washing ensured that no vessel was defiled by my touch.

The journey back was pleasanter both on account of the shade and on account of the company of a certain Indian lawyer. I had the pleasure of having tea with this gentle-

man afterwards. This meal consisted of hard-boiled eggs, sweetmeats, grapes, and black tea. It was very amusing to see this gentleman carefully take the shell off an egg and hand the latter over to me; so I, not to be beaten, did the same and handed him one in return.

During one tour in the Charpar District, I stayed in the canal rest-house at Jaghera, making this place my headquarters while I visited the surrounding villages. This district is well served by a railway, so that I was able to go as far as Ahmedgarh by train. With me I had a considerable amount of kit, as I carried food for a fortnight's tour. With a little persuasion a local zamindar (land-owner) was induced to convey my kit to the rest-house on his heavy, cumbrous byle-wagon, drawn by two oxen, while I went across the fields. These, as the season was early autumn, were covered with a ripening crop of millet and maize. Here and there sugar-cane in smaller patches prevailed. During my stay all these crops were in the process of being harvested. All were cut by hand. I saw no agricultural machinery, and all the implements used were very primitive and constructed chiefly of wood.

Charpar
District.

The local folk wore the dhōti (kilt), and

generally walked without footgear. Many a time I have met travellers carrying their shoes on their heads to save them from being worn out too soon.

To all the villages I had proposed visiting, I had previously sent on recruits to prepare the inhabitants for my arrival. These villages I visited in the usual rough country tonga, which came daily from Dehlon, five miles away.

Inter-
Village
Communications.

Once off the main macadamised British engineered roads, inter-communication among the villages was practically confined to mere tortuous tracks that wound willy-nilly across irrigated fields, over sand dunes, amongst clumps of tall grass; in fact, anywhere but in a straight line. The fields containing the track were irrigated periodically, so that tonga traffic at such a period leaves an inheritance of deep wheel tracks, which the hot sun soon bakes hard. In process of time the ruts sink deeper and deeper, so that it is a common sight to meet cart tracks two feet below the general level of the ground. To remain in a springless tonga while it negotiated such roads would disturb the equanimity of a god. Accordingly, I preferred walking, although this at times was equally trying, for my

heavy boots sank into the damp soil, or sand, and prickly thorns had a playful habit of getting in through the lace-holes of my boots. In other places the road was wide enough, but we had to pull up suddenly in order to negotiate an occasional banked-up channel that crossed at right angles. We easily got across, but the horse took much persuasion, accompanied by a lengthy expletive from the tonga-walla, before it could be induced to drag the tonga over.

On my arrival at a village I was generally conducted to the dharmasala, or guest-house, and there, seated in an armchair, if the village boasted of one, or on a string-bed, if not, the greybeards would squat around me in a semi-circle while I explained my business. The dharmasala is a sure indication of the prosperity of the village. In large villages the guest-house is one of the best-built buildings, and is often adorned with quaint carvings and paintings. In small villages the village main gate forms the guest-house.

After the recruiting meeting I was usually offered boiled goat's milk in a shallow brass vessel. In one village white men usually signed their names in a register. It was noticeable that the date of a previous sig-

nature to mine was over a year old. White officers only visited the village on recruiting duty, or for the sake of the good "heron" (deer) hunting.

Island Thānās.

The boundary between native and British territories in the neighbourhood of Ludhiāna District is extremely irregular. In some cases island Thānās (Police-districts), under British administration, but surrounded by native territory, occur. Such examples are the Thānās of Shāknā and Dhāpāli, in the Jāgrāon Tehsil. These Thānās are very much isolated, being off the railway track, and reached only by rough roads.

Attempts have been made to re-form the boundary line by making mutual exchanges of territory, such as island Thānās. However, the root of the trouble is the question of taxation. To keep up the revenue of tiny States, such as Mālerkōtlā and Jhind, the villagers are taxed sometimes treble that of a neighbouring British administered one. Naturally, the latter villagers object to the prospect of having their present taxes trebled for the doubtful advantage of being governed by a native potentate.

Influenza Outbreak.

The great ravages made by the influenza outbreak greatly affected recruiting results.



SIKH LUMBADARS,
OUTSIDE GATEWAY, GURM.



GROUP OF RAW RECRUITS,
REGIMENTAL RECRUITING DEPOT, LUDHIANA.
Note Pipal Trees.



The epidemic seized on young and old. In some villages every house had its victim, and outside the walls funeral pyres smoked daily. Owing to the thickly populated nature of the villages with their crowded courts, absence of drains, and the presence of oxen in the courtyards or sometimes in the living rooms of houses, the plague was fed and nourished.

The sufferers made little effort to seek medical aid, but looked on it as a visitation from Allah. To tell a man he was suffering from influenza was practically the same as ordering him to his death, so great was the fear of it.

It was good to return to Ludhiana again, to read a newspaper and to watch the Calcutta mail with its load of humanity black and white.

The countryside looked very inviting. The well laid out gardens looked doubly attractive with their masses of dense foliage and bold colour-wastes of the flowers. The hedge-rows bordering some roads were one mass of pink flowering creeper and giant cacti. The trees overhung the roads from each side, and met sometimes in the middle so as to form a veritable tunnel of foliage. Instead of the dull-plumed English hedgerow birds, one saw flights of green screaming

parrots or a frightened peacock seeking the shelter of the undergrowth. Tree rats were everywhere; they jumped across the road in front of one with the greatest effrontery and unconcern imaginable.

Dak-
Bungalow
Life.

My only regret was the return to dak-bungalow life, with its many inconveniences. In such places flies always abound. They fell into one's soup, bumped against the lamp, settled on the nape of one's neck until one was forced to seek refuge under a mosquito net. Even when in bed under a net, the sand-flies gave one a "rough time" in the form of bites, while their larger "confrères" kept up a perpetual hum through the darker hours of the night.

The
Treasury.

Getting money to pay the men was no easy task. In the absence of any bank, an order had to be obtained on the Treasury for issue of the required amount of silver. At this time little silver was paid by banks owing to the great shortage, necessitating Government action. Such a shortage was brought about by the Orientals' little faith in banks. All silver available was no doubt buried in the ground by millions of the natives.

The treasury was built on the same lines

as a fort. It had high walls, and only one entrance through a porched gateway, and an armed guard was always posted at this gateway. The business of the treasury was entirely conducted by native officials, who sat on their heels on the floor before miniature desks. On the floor were piles of silver and aluminium coins; near at hand was a rough wooden box containing piles of notes. All entries were made by the cashier in Arabic with a reed pen on buff-coloured ledgers. This pen enabled the writer to get the desired thickening of Arabic characters with all the speed of a shorthand writer.

With the news of the armistice, came a message from headquarters to close the depôt. Recruits now flocked to join the colours, tempted by the bonus of fifty rupees. But it was too late, for no more recruits were required.

Very soon afterwards came the order to reduce regiments to a certain cadre. A situation now arose contrary to that which existed with white troops. The Sikhs did not want to be demobilised; they were far too happy as soldiers earning more than they could from agriculture. Accordingly the administrative staff had to set to work with discretion. All men below the peace-time standard were de-

mobilised, then one by one the men were weeded out.

Afghan
War.

The army was in this disorganised state when the recent war with Afghanistan broke out. The Sikh regiments at Peshawar were among the first in action, and distinguished themselves with their accustomed dash and bravery in the action before Dacca Fort.

The Sikh soldier now plays a large part in the garrisoning of our frontiers in the Near and Far East. He is loyal, brave, and trustworthy. To make such a fine example of a soldier from a rough ungainly peasant reflects no small praise on the handful of British officers who control so ably the fortunes of native regiments. They work cheerfully under the rigours of a tropical climate; unseen by the public eye, which often levies on their heads uncalled-for criticism, they maintain with honour the integrity of the British race.

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